ABSTRACT

Title of Document: THE ETHNIC ETHICAL LEADER: HOW PERCEPTIONS OF A LEADER'S ETHNICITY AND GENDER ALTER PERCEPTIONS OF THEIR ETHICALITY

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The present dissertation examines the role of ethnicity and gender on perceptions of a leaders' ethicality. Based on the literature of social information processing, people are recognized as leaders when the content of a perceiver's prototype matches the target's characteristics, attributes, and behaviors (CABs). With this dissertation, I add to the existing literature by testing whether categorizing someone as a leader is associated with perceptions of their ethicality. The goal of this dissertation is to examine if the most salient leadership CABS reported in the extant leadership literature are those that may be more consistent with stereotypes of White males than other demographic groups. I hope to examine if leaders may be perceived as less ethical as a function of their race or gender due to a mismatch between the perceiver's leadership prototype and the target's leadership CABs. Four studies were conducted to investigate these issues, with a focus on perceptions of leader's ethicality. In Study 1, participants generated the necessary CABS to describe leaders of different ethnicities, genders and

contexts and rated these CABS on how much they fit with the idea of the leader. Study 2 exposed participants to a resume that had a description of a leader that varied in the leader's gender and ethnicity (White, Black, and Hispanic). Study 3 was a within-subject experiment that utilized an implicit assessment of participant's attitudes regarding the ethicality the leaders with an Implicit Attitude Test. In study 4, a between-subject design was used to test the role of context in influencing the salience of the ethnic/gender leadership prototypes. Specifically, the situational context (occupation) and ethnicity (specifically Black) were manipulated and MBA students rated the ethicality of the leader. This dissertation represents the first empirical investigation of leader ethicality through the lens of ethnicity and gender.

THE ETHNIC ETHICAL LEADER: HOW PERCEPTIONS OF A LEADER'S ETHNICITY AND GENDER ALTER PERCEPTIONS OF THEIR ETHICALITY

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Dedication

I dedicate this to my mother, grandmother, and family. They have been the constant pillars of support for all of my individual academic and life goals. Everything I achieve is for my family and having them stand with me as unwavering support and guidance rejuvenates me when times are rough. Even though I lost my mother at the beginning of my graduate school journey, I know that she has been my loudest brightest cheerleader throughout my graduate career. Shukran Ummi.

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Chapter 1: Introduction

The ethnic ethical leader: How perceptions of a leader's ethnicity and gender alters perceptions of their ethicality

During the 2008 presidential election, voters were gripped with the showdown between the Democratic Party's candidates Barack Obama and Hilary Clinton. To some degree, the real fascination behind this showdown was the evaluation of whether these two potential leaders had what it takes to lead the future for the United States of America. Since the 2008 and the more recent 2012 election, a recurring question that is asked is how effective is President Obama and how does he compare to the presidents who came before? During the campaigns, Obama made it a point to continually emphasize his ethics by reinforcing his Christian heritage, his church going frequency and by distancing himself from Islam (which was considered too extreme for the American public). He did this to make it apparent that he could be considered "similar" to the majority of the American population (Homick, 2008). The present dissertation adds an additional layer to these reoccurring questions by examining how others evaluate ethicality of a leader such as President Obama's when compared to a more 'prototypical' president.

If we compare the qualities of our current representations of well-known leaders (such as Barack Obama) with a leader that is fondly recalled or an example of what we consider the epitome of a presidential leader (such as John. F. Kennedy), one can ask whether the same characteristics are brought forth. When we think about our first experience with leadership or are asked to describe the qualities or characteristics that are most important in our leaders, we may start listing internal and external qualities that fit with the average conceptualization of a leader. When we imagine a strong, charismatic, independent leader, does this image loose its saliency if we add the words Hispanic,

Black, or Asian? The present dissertation seeks to answer the important question that has yet to be thoroughly examined; how important ethnicity may be when considering successful ethical leaders (Rosette, Leonardelli & Phillips, 2008).

When evaluating an organization as effective (or in this case ethical), evaluators often look towards an organization's leaders as their primary source of information (Hambrick & Mason, 1984). Therefore, the demographic composition of the organizational leaders becomes an important component for which they base their evaluations. Whether or not we choose to vocalize it, identifying others by their gender and race is a quick and automatic categorization that everyone utilizes (e.g., Ito & Urland, 2003). In 2010, 34 % of the US was estimated to be racial-ethnic minorities and is projected to surpass 54% by the year 2050 (US Census, 2011). In addition to ethnic diversity, women currently represent just over 50% of the population (US Census, 2011). However, in 2009 only 13% of all executives in public and private sectors were minorities (U.S. Bureau of Labor Statistics, 2009). Regardless of such dramatic shifts in the US population and in the racial/gender demographics of business leaders, a persistent glass ceiling exists for these groups (Federal Glass Ceiling Commission, 2010). Indeed, often women and minorities have lower managerial promotion ratings (Landau, 2006), lower job suitability ratings (Hosoda, Stone, & Stone-Romero, 2003), and are often evaluated more stringently on their successes and failures (Cox & Nkomo, 1990; Dewberry, 2001; Rosette et al., 2008). Thus, it is important to understand how ethnicity/gender influences perceptions of leadership and how these perceptions may also extend toward the judgments about that leader's ethicality.

Leadership evaluations (i.e. behaviors, abilities, and recognition by others) represent an essential assessment of that leader's ability to effectively produce for the organization, these evaluations can have an important impact on demonstrating that the leader is considered valued by the organization since it speaks to their ability to lead the organization (Valder, 1977; Lord & Maher, 1991; Meindl & Ehrlich, 1987). Understanding how judgments of different types of leaders are generated is therefore an important endeavor. How people react to leaders from different ethnic/gendered background may fluctuate depending on how far ethnicity may vary from their average conception of leadership. This discrepancy in turn may alter how ethical that leader is perceived to be.

My dissertation compares the attributes and characteristic expectations that people have for ethnic/female leaders (e.g., Barack Obama, Hilary Clinton) to the normative leaders in this society (e.g., John. F. Kennedy). My dissertation investigates: Does the content of the ethnic/female leader prototype differ from the normative leader prototype? Do the two prototypes differ as a function of the ethnicity/gender of the evaluator? Finally, do people perceive an ethnic/female leader as less ethical than a normative leader? Four studies were conducted to address these questions. To fully investigate these issues, I first delve into the literature on the cognitive process of categorization and how this theory informs our knowledge about how humans process information to understand the world. I then discuss the connectionist theory of leadership as a framework for investigating the connection between ethnicity, gender and ethicality. I will provide a summary of the related research on leadership characterization, discuss the state of ethnic/racial diversity and gender in the leadership literature, briefly touch on the role of

social identity (in-group/out-group processing) and finally connect this topic to the nascent field of ethical leadership. Finally, I will offer a theory that integrates these topics together cohesively, suggest several hypotheses and create a methodology to test this theory. This dissertation represents the first empirical investigation of leader ethicality through the lens of ethnicity and gender.

Categorization of Cognitive Phenomena

To create a system of organization for the complex stimuli they encounter, human beings categorize both objects and social perceptions (Fiske & Neuberg, 1990). We develop specific cognitive structures such as prototypes so that we form knowledge, beliefs, or expectations about the set of shared characteristics, attributes, and behaviors (CABs) typical for a particular phenomenon or construct (e.g., chair, circle, leader, ethical person) (Devine & Elliot, 1995)[1]. Without these categories, we would be quickly inundated by every sensation and interaction we experience and unable to remember past events as we attempt to consolidate the new or unique events that we encounter (Rosch, 1975). Categorization of information provides us with a sense of stability; it helps us not only process information, but also to make future predictions about an event or object based on previous information and to compare these events/objects to discern important differences (Smith & Medin, 1981).

The predominant theory regarding categorization (or the *classical view*) considered "all instances of a concept shared common properties and that these common properties were necessary and sufficient to define the concept" (Smith & Medin, 1981, p. 1-2). This view focused on how multiple examples of a concept vary on how much they represent the concept with their shared and non-shared CABs (Katz & Postal, 1964).

Smith and Medin (1981) describe the classical view of categorization as having one description of the category, and this description elucidates the specific properties that all members of the category must possess.

In addition to the classical view, researchers have proposed the probabilistic view of categorization (Labov, 1973). From this perspective, to accurately identify a concept, certain instances of a category are believed to have more critical components than others. When the critical components of a category are not equally distributed throughout the category, then those clusters of the category are believed to be more representative/central/important to this category. A third view that has been considered, in addition to the classical and probabilistic views is the exemplar view. With this view, there is no single representation of an entire class or concept that acts as an accurate depiction of the category itself. Instead, specific representations of the classes' exemplars help to form that category in totality, (building blocks of a concepts are formed by their representations, Smith & Medin, 1981). While the probabilistic and exemplar view represents an extension of our understanding of how we categorize knowledge, the classical theory utilizes the concept of prototypes, which is essential in the current examination of the leadership category.

Prototypes emerge from repeated use of categories and it represents an ideal type, form or instance of other things in the same category (Rorsh & Mervis, 1975). Prototypes can be conceptualized as a central tendency or average characteristics of the CABs contained in a category (Rosch, 1978; Smith & Medin, 1981). Prototypes are learned and emerge over time as individuals encounter repeated instances of the given category (Lord, Foti & de Vader, 1984; Rorsh & Mervis, 1975). A basic example of a leader

prototype is a person, who has influence over others (Vroom, 1964). These categories create distinctions from other categories and are said to form prototypical characteristics (i.e. they develop cognitive cues to the evaluator as to the likelihood that an entity falls within a particular category, Beach, 1964).

To expand on the effectiveness of prototypes for helping to distinguish categories consider the category of bird. A prototypical example of a bird would be one which flies, sings, builds nests and lays eggs, all of which are considered defining attributes of the category, bird. A penguin, while assigned to the category of bird would not be a prototypical representation due to its lack of defining attributes. There are some shared characteristics between the non-typical example and the prototype (i.e., lay eggs and nest-building) and yet there are more differences than similarities (i.e., swims instead of flies; does not sing).

Rosch and her colleagues (Rosch, 1973; 1975; Rosch & Mervis, 1975) have agreed that most natural categories do not have well-defined rules or fixed boundaries separating alternative categories. Instead, evaluators can vary in the degree to which they judge a prototype of a category, evaluators may offer some shared or overlapping characteristics but they may also offer a variety of different characteristics that will range from evaluator to evaluator. Psychological research on categorization has taken an intense interest in how humans classify objects and how this classification affects behavior (McKinley & Nosofsky (1995). It is by comparing the degree and nature of the overlap between the target and prototype (i.e., understanding the CABs that differ between the target and prototype) that we are able to understand how the prototype match (or mismatch) affects perceptions (Reed, 1972). For example, is it essential that we

consider flight a characteristic of a bird and if so, does that make penguins a second-class citizen in the world/categories of birds? Or, rephrasing the question to the topic of this dissertation, can we evaluate the ethicality of White leaders and Black leaders as equivalent or do we add conditions to when we view one type of leader as ethical compared to the other?

Mason, Cloutier and Macrae, (2006) have found that categorical thinking continue to underlie social perceptions, regardless of conscious efforts. Even the briefest exposure to facial features enables perceiver to estimate a host of valuable clues about the target such as their identity, (Bruce, 1988; Bruce &Young, 1986), emotional state (Harper, Wiens, & Matarazzo, 1978; Izard, 1977), or even their attention or interests (Butterworth & Jarrett, 1991; Lee, Eskritt, Symons, & Muir, 1998). In particular, Eberhardt, Goff, Purdie and Davies (2004) demonstrated in a series of experiments that evaluators categorize social groups with certain concepts. They describe this as a visual tuning device that produces shifts in perception and attention that can influence decision-making and behavior. These findings are similar to the well-established researched paradigm 'what is beautiful is good,' which demonstrates that people make positive global inferences about a person primarily due to their perceived level of attractiveness. These findings are apparent even if participants only see a picture (Dion, Berscheid, & Walster, 1972; Adams, 1982; Alley & Hildebrandt, 1988; Berscheid, 1981; Berscheid & Walster, 1974; Dion, 1981;1986; Eagly, Ashmore, Makhijani, & Longo, 1991; Hatfield & Sprecher, 1986; Patzer, 1985). Fiske and Taylor (2008) conducted research that demonstrated that people make automatic trait inferences or dispositional attributions based on their behavior or appearance to help understand or explain the causes of their

behavior. This current dissertation suggests that based primarily on a leader's gender and ethnicity, evaluators will make global evaluations regarding the leaders perceived ethicality.

Additionally, previous research that compares minority and majority groups has demonstrated that the perception of the majority group member's act as an "entitative" representation of social groups, are often considered to be the prototype that all others are compared against based on the level of shared characteristics and expectations that exist because they are the predominant group (Mullen, 1991). In particular, Mullen posits that minority group member characteristics are consistently assessed against those of the majority category prototype. This can lead to minority group members being perceived as more homogeneous than members of the majority group with the minority group members being depersonalized to a greater rate than members of the majority group. This has been referred to as the outgroup homogeneity effect: Namely, categories to which the perceiver does not belong are judge to be less variable or more homogenous on stereotype-relevant characteristics than those of the in-group members. This is believed to be one factor contributing to stereotyping and bias (Quattrone & Jones, 1980; Stangor, Lynch Duan, & Glass, 1992). For example, when Blacks are compared to Whites, the traits and characteristics that are recalled for Whites may have more range or be more variable than those that are recalled for Blacks. White Male leaders may be seen as related to the leader prototype compared to the other leaders. The characteristics recalled for Blacks may be constrained to more stereotypic characteristics than those recalled for Whites (e.g. Blacks like to dance, are religious or are athletic while Whites are charming,

funny, etc). It is also possible that when Female leaders are described, traits that describe interdependence of communal nature will be listed.

In the present dissertation, I am interested in the consequences that occur when people discern differences between a prototype and a target when it is related to a topic such as leadership. The aim of this project is to determine what is typically considered when thinking about ethnic and female leadership, create a comparison between classic leader prototypes against the more novel ethnic leader prototype and to extend the literature on leadership and our understanding for how this research stream may inform our understanding of ethical judgments of our leaders. This dissertation contributes to the leadership literature due to the lack of empirical data on ethnicity and leadership (which will be discussed below). Additionally, it extends the literature on ethical leadership by adding a more detailed understanding how ethnicity and gender affect the content of prototypes and how that subsequently affects perceptions of ethicality. As a way of gaining a complete picture of how people cognitive conceptualize leadership, it is necessary to delve into the literature of leadership and its cognitive connections.

Leadership and the Cognitive Process

Leadership has been defined as one individual[2] having influence over others (Vroom, 1964). It is a social process comprising of relationships at the dyadic, group, organization and societal levels (Eagly & Chin, 2010). Traditionally, leadership has been examined in the context of its effect on followers. The primary question has been what 'types' of leaders produce what 'types' of behaviors (Bass, 1985; House, 1977; Bennis & Nanus, 1985). For example, within the leadership domain the different types have included personality characteristics such as charismatic, authentic or toxic leadership and

a leader's effect on others such as transactional, servant, or democratic leadership (Bass & Bass, 2008). While the question of which type of leadership is the most effective is still in process of being answered, another question that has been asked is "What traits are important for being a leader?"

The research on leadership and traits began as a way of distinguishing leaders from non-leaders and as a way of predicting leadership effectiveness (DeRue, Nahrgang, Wellman, & Humphrey, 2011). The trait-based approach to leadership was one of the first forays into leadership research and focused almost exclusively on demographics such as gender, age, education and personality characteristics (Bass, 1990; DeRue, et al., 2011). Ethnicity has only recently been considered when evaluating leader effectiveness (Rosette et al., 200). The main critique of the trait-based research paradigm was that it was not theoretically driven and the empirical results obtained from it were inconsistent (Colbert, Judge, Choi, & Wang, 2012; House & Aditya, 1997; Mann, 1959; Stogdill, 1948). In fact, there was such an extensive number of traits that were considered essential for leadership (43: Bass, 1990) that, coupled with a lack of theoretical framework, difficulties arose comparing results across studies. Quickly abandoning the trait perspective, the emphasis soon switched to examining which leadership behaviors were predictive of effectiveness (Jenkins, 1947; Mann, 1959; Stogdill, 1948). The prominent theories within the leader behavior paradigm include Fiedler's (1967) contingency model, Blake and Mouton's (1964) managerial grid, and transformational/transactional leadership (Bass, 1985; Podsakoff, MacKenzie, Moorman, & Fetter, 1990).

Individuals gradually develop a set of beliefs about the CABs of leaders (referred to as naïve theories of leadership, see Offerman, Kennedy, & Wirtz, 1994). This

prototypical formation evolves from what is experienced in day to day interactions, what the societal standards are and what the environment purports as the ideal leader traits and behaviors (Bass, 1981; 1990). When individuals develop a prototypical expectation of what leadership is, they form implicit theories of leadership (Schyns & Meindl, 2005). Implicit leadership theory suggests that leader prototypes are the impetus of leader judgments (Den Hartog et al., 1999; Offerman et al., 1994). These implicit theories provide a guideline for the perceptions of others by providing generic assumptions and beliefs about what to expect and how to adapt to various individuals (Brown, Scott & Lewis, 2004; Fiske & Taylor, 1984; 2008). These prototypes act as mental short cuts that help to divert resources or mental functions toward processes that require a significant amount of effort (Fiske & Taylor, 1984).

With these implicit theories in place, individuals are able to encode and evaluate social cues of behaviors, emotions, and facilitate interactions among individuals (Lord et al., 1982; Lord & Maher, 1991; Lord et al., 1984). As a reflection of how effective a leader is perceived, an important consideration is the leader prototype formation of their followers. If the behavior or traits of the leader match what the followers (or evaluators) expectation of what a leader should be, leaders are more likely to be highly rated in effectiveness (Nye & Forsyth, 1991). It is through the processes of categorization of CABs that are considered fundamental to the leadership category that help to create the prototype or "ideal" which is essential to the cognitive formation of leadership (Lord & Shondrick, 2011). It is through our formation of CABs that we begin to construct a prototype what we expect in a leader. The question that has yet to be fully answered is what are the essential CABs for ethnic and female leaders and how do these CABs differ

from those of the "ideal" prototype? How we compile our CABs into a leader prototype will next be discussed in more detail.

Leadership Categorization

As a method of understanding how evaluators perceive of leaders, leadership categorization theory was developed (Lord, 1985; Lord, Foti & Phillip, 1982; Lord & Maher, 1991). This theory distinguishes itself from other perspectives of leadership by investigating the category composition of leaders (instead of the idealized influences on followers). According to Lord and Maher (1991), the main component of this theory is that evaluators compare a target person with a preexisting knowledge structure of their leadership prototype. It is a recognition-based process of comparing a target against the prototype and discerning any potential match or mismatch that can then influence the evaluator's perception of that target. The more similar the target is to the prototype; the more likely the target is to be evaluated as a leader. If the target is not perceived to be similar to the prototype (or there is a mismatch), then the target is less likely to be perceived as a leader (Eagly & Karau, 2002). The strength of the expected association between the prototype and the target informs the formation of the stereotypic expectation and can influence what is perceived to be relevant information about the characteristics of the categorization (Biernat, Manis, & Nelson, 1991; Stangor & McMillan, 1992). Therefore, the prototype (e.g., an ideal leader) is reconsolidated by the expectations and characteristics about what it should be by how closely aligned it is with the majority group rather than the minority group target.

Previous research has linked a variety of organizational outcomes to reaction to prototypical leaders. For example, leaders who are described as close to the prototypes

were given higher general impression ratings compared to leaders who were not considered close to the prototype (Fraser & Lord, 1988). Additionally, Foti, Fraser and Lord, (1982) found that when political leaders were described as effective, participants assigned them with characteristics and traits considered essential for prototypical or ideal leaders. Prototypical leaders were considered effective sense-makers by being organizational social anchors that provided an enhanced connection between action and meaning within the organization (O'Malley, Ritchie, Lord, Gregory, & Young, 2009). Engle and Lord (1997) prototypical traits predicted leader liking and leader member-exchange congruence.

Lord and colleagues (see also Bass, 1990; Lord, 1977; 1985, Lord & Alliger, 1985; Lord et al., 1982; Lord & Maher, 1991; Lord & Shondrick, 2011, Scott-Jones & Nelson-LeGall, 1986; Stone, Johnson, Stone-Romero, & Hartmen 2006) posit that there are certain common characteristics in the American leadership prototype, specifically intelligence, autonomy, aggressiveness, strength, assertiveness, independence, and self-confidence. Project GLOBE (House, Hanges, Dorfman, Javidan, & Gupta, 2004; see also Den Hartog, House, Hanges, Ruiz-Quintanilla, & Dorfman, 1999) established that decisiveness, intelligence, team building, communication and coordination are key traits associated with effective leadership across 62 different societies. While these traits have been established on a global scale, what is still not known is what effect ethnicity plays in evaluations of the leadership prototype? Additionally, if these leaders are not considered prototypical, how does that affect evaluations of their effectiveness and ethicality? One of the most important questions that has yet to be answered is what characteristics are considered essential for leaders in the creation of the leader prototype.

The traits that are described as common for the typical American leadership prototype have been described as typical White male traits (Grossman & Chester, 1990; Runkle & Ayman, 1997). Offerman, Kennedy and Wirtz (1994) have identified sensitivity, dedication, charisma, attractiveness, intelligence, strength, and masculinity as key traits that establish an implicit theory of leadership regardless of the leader's gender (and the gender of the evaluator). Additional traits that have been associated with the leadership prototype are competent, consistent, conscientious, objective, well-informed, rational, and self-controlled (Landau, 1995; Leong & Gupta, 2007). When creating this leader prototype, is ethicality rated as necessary for the overall leader category?

In a project that examined how individuals across the world view leadership, project GLOBE (Global Leadership and Organizational Behavior Effectiveness) found that a highly valued trait across societies is the concept of trustworthiness (House et al., 2004). Additionally, Javidan, Dorfman, De Luque, and House (2006) elaborate on the GLOBE findings that for a leader to be considered effective across the world, they have to be viewed as having integrity and being trustworthy. Petrick and Quinn (1997) describe a core component to a manager or leader being viewed as having ethics are displaying a strong sense of integrity. Therefore, being considered trustworthy and having integrity are considered crucial aspects to the worldwide leadership prototype, the question that still exists is, how do leaders of different ethnic/gender backgrounds compare to this prototype and how are they evaluated in their ethicality? When implicitly evaluating these leaders, will the prototypical leaders (White male) be evaluated faster compared to minority and female leaders?

It has been acknowledged that there is a lack of consideration in the perception of how racial-ethnicity may alter perceptions of leaders (Parker & Ogilvie, 1996; Waring, 2003). Do leaders from different ethnic backgrounds activate the same category of leadership that those who are typically portrayed as leaders (the White male)? In turn, what is the potential impact this differential activation may have on important outcomes such as leader ethicality? To answer questions that target the role of context and perceivers background the connectionist theory was formulated.

Connectionist Framework

While categorization theory helps to conceptualize leadership perception, and incorporates information about social information, it doesn't account for contextual constraints such as the situation or re-adjustments. Connectionist theory represents an extension of the categorization literature because it helps to provide definition to the fuzzy boundaries that surround the category of leadership (Rosch, 1978; Smith & Medin, 1981). This theory helps to simplify our understanding of the categorization process of prototypes and parsimoniously explains how the subtle but replicable differences in prototypes come about without causing the information processing system to crash to a halt as the brain searches for a relevant prototype that matches some perceived target. Lord and colleagues used connectionist theory in an effort to understand "spur of the moment" leadership perceptions (Lord, Brown, & Harvey, 2001; Lord, Brown, Harvey, & Hall, 2001). They describe the leadership prototypes as those that are reconstructed based on the situation and on what is previously stored in memory and represents a more dynamic theory than leader categorization which incorporates the varying contexts that exists for leadership.

Connectionist theory rests on the idea that within the perceiver there are neural networks, which are a series of interconnected nodes that house and transmit information, see Figure 1 (for review see, Hanges et al., 2000; Hogue & Lord, 2007). In a connectionist framework, a prototype is the pattern that is activated among the links in the network. The activity pattern of the network is determined by previous history (or stored within their memory) and contextual information from the environment (Hogue & Lord, 2007). Therefore, the leadership prototype that is activated relies on what a person has previously experienced with adjustments being made for the current context. This activation of the prototype may therefore differ between people (due to differences in previous experience) and thus this explains individual differences reactions to stimuli (Hogue & Lord, 2007). While there should be some similarities between what activates the leadership prototype based on societal expectations, the differences that context and previous experience provides the perceiver could be minimal or could be drastic (Lord et al., 2001). Even if the activation of the prototype is the same and perceivers are relying on a common experiential background, there may still be discernible differences to the prototype expectations (Sy et al., 2010). The connectionist theory is therefore ideal for this dissertation because it allows for an integration of the information that is necessary when considering leadership prototypes. This theory accounts for the role of the context, previous experience, expectations of stereotypes, ethics, gender, and characteristics when forming the leadership prototype.

For this dissertation, the connectionist theory provides a much needed glimpse into how the role that context may play for who is considered a leader during at certain times (Fiske, Cuddy, Glick, & Xu, 2002). By limiting the participants to brief information

(providing only a picture and a brief bio) regarding the leader to the participants will force them to react based on their previous experiences with leaders or societal or stereotypic expectation which is a dynamic test of how ethnicity influences ethical evaluations of leader.

Ethnic Leader Literature

Given the absence of clear information, appearance-based inferences about a leader can be highly influential when forming a decision (Olivola, Sussman, Tsetsos, Kang & Todorov, 2012). When racial groups are disproportionately associated with certain occupations or characteristics, certain traits may begin to be inferred to those racial groups (Morrison & Von Glinow, 1990), and this may be especially true within the leadership domain. Consistently, the literature on ethnic/racial diversity in leadership has been fragmented and these leaders have been conceived of more as the 'targets of influence rather than as the agents of influence' (DiTomaso & Hooijberg, 1996 p.165). It has often been stated that leaders should promote diversity through programs or initiatives for the organization but rarely do leader implement these programs with the intention of increase leaders or managers from diverse populations (Bartol, Martin, & Kromkowski, 2003; DiTomaso & Hooijberg, 1996; Hurley & Giannantonio, 1999). Minorities have been said to be seen as not suited for management (Morrison & Von Glinow, 1990) and that they have different leadership styles (Adams, 1978; Bass, 1990) from White men. A potential reason for this disparity of considering ethnic leaders as prototypical leaders could be a human capital issue (education, training or job experience) or it could relate to issues relating to social-structural features (occupational segregation, historical reproductions) (Arrow, 1998; Blau & Kahn, 2006; Grodsky &

Pager, 2001; Maume, 1999). However, little research has actually examined how and to what extent ethnic leaders are seen as different.

Indeed, currently within the leadership literature, there have been few studies to truly investigate the aspect of ethnically diverse leaders (see Osipina & Foldy, 2009 for a recent review). In fact, it is only relatively recently that the role of race has been considered when examining the cognitive conceptualization of what is leadership (Chung-Herrera & Lankau, 2005; Rosette et al., 2008; Sy et al., 2001). Rosette et al., (2008) conducted a study, which demonstrated that when participants read a snippet from a newspaper about a leader, they were significantly more likely to perceive that leader as White. Even when the surrounding community of the leader was described as homogeneously Black, the leader was still perceived as White. Another influential study on minorities and leadership prototypes is the Sy and colleagues (2010). These authors found that while Asian Americans are viewed as technically competent (see also, Leong & Serafica, 1995), they are evaluated as less 'ideal' leaders than Whites in contexts in which technical competence was not highly valued (sales positions versus engineering positions; Hsia, 1988; Leong, 1995; Leong & Serafica, 1995). These studies indicate that when people conceptualize leaders, the ethnicity that is most likely activated is that of the prototype (aka White) and that the context or occupation of the leader plays a crucial role to forming these judgments (Adams, 1963; Wohlers, Hall, & London, 1993).

For the traits that ethnic leaders are known to activate it has been suggested that Black women are seen as self-confident and assertive (Sanchez-Hucles & Davis, 2010), sassy (Bell & Nkomo, 2001), maternal and nurturing (Dillard, 1995). Asian leaders have a collectivistic orientation emphasizing harmony among group members (Cheung &

Halpern, 2010; Kawahara, Esnil, & Hsu, 2007) and that they have benevolently paternalistic behavior (Ayman & Korabick, 2010). They are also perceived as diligent, smart, well organized, motivated, and well educated (Bourne, 1975; Landau, 1995; Sue & Sue, 1974). Minorities have also been described as concerned with integrity and justice especially as they relate to inclusion and fair treatment (Fassinger, Shullman & Stevenson, 2010). However, negative trait activation has also found that Blacks are stereotyped as antagonistic and lacking in competence, Hispanics are uneducated and unambitious and Asians are quiet and unassertive (Madon, Guyll, Hilbert, Kyriakatos & Vogel, 2006). However, without a more detailed understanding of how these ethnicities compare to the prototype of leader, it is unclear which characteristics may be needed to expand our understanding of leadership.

What types of characteristics are more likely to occur and what are the reactions when we compare our prototypical leaders against those of different ethnic background (White vs. Black vs. Hispanic?) How do these differential CABs impact perceived ethicality or effectiveness of that leader? What is the role of context when evaluating these ethnic leaders? The previous implicit theories of leaders and the connectionist theory stipulate that evaluators will vary in their judgment and these differences the evaluator's judgments of ethicality. These differences will depend solely on the previous experience or context that the perceiver has been or is exposed to. While the literature and previous experience of ethnic leaders is slower coming, research on the impact of gender and leadership continues to grow.

Gender and Leadership

With ethnic leadership as a comparison group, the amount of literature on gender and leadership can be considered overflowing (Koenig, Eagly, Mitchell & Ristikari, 2011). Consistently, this topic has been researched due to the pernicious evidence of the glass ceiling effect, which has been described as "the unseen, yet unbreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements" (Federal Glass Ceiling Commission, 1995, p. 4; 2010). One of the persistent findings that have been found in this field is that female leaders suffer higher levels of discrimination and prejudice in male dominated fields (Heilman, Wallen, Fuchs, & Tamkins, 2004; Swim, Borgida, Maruyama, & Myers, 1989). This dissertation attempts to answer the call put forth by Kark and Eagly (2010) to gain a more detailed understanding of effectiveness (and in this case, ethical) leadership by examining both male and female leadership behaviors or characteristics.

Female leaders in male dominated fields such as engineering, sales, and those related to the physical sciences are often given lower performance evaluations compared to equivalently qualified male colleagues (Eagly, Karau, & Makhijani, 1995; Eagly, Makhijani, & Klonsky, 1992). A potential reason that this might occur may in part be due to the prevalent stereotype of leader being principally considered masculine (Cabrera, Sauer, & Thomas-Hunt, 2009; Heilman, Block, Martell, & Simon, 1989; Lyness & Heilman, 2006; Powell, Butterfield, & Parent, 2002; Schein, 1973, 1975. In fact, Koenig and colleagues (2011) conducted a 69 study meta-analysis which confirmed this effect. One of the research paradigms that these authors investigated was Schein's (1973) theory "think manager- think male," which indicates that the stereotype of a leader is equivalent

to the stereotype ‘male’. Schein’s theory has crossed over 40 studies and correlated the mean ratings of leaders or managers who were described as either men or women. The result of these studies showed that there was a stronger association between men and leader than women and leader.

Importantly, female leaders who exhibit more masculine characteristics such as agency, assertiveness, and creativity are evaluated very highly by their subordinate and supervisors (Eagly & Carli, 2007; Eagly & Karau, 2002; Scott & Brown, 2006). Even within the health care industry, which has a high percentage of female employees, are more prone to hiring and promoting male managers than female managers (Eagly & Chin, 2011; Eagly & Karau, 2002; Powell et al., 2002). This indicates that the socio-cultural prototype of a leader is male regardless of the surrounding occupational population (Ragins & Sundstrom, 1989; Wirth, 2001). This once again brings forth the question of the role of context in leadership evaluations.

Within the gender and leadership literature, the traits that have been consistently shown to be associated with females are communal, sensitive, flexible, kind, warm, and gentle (Eagly & Chin, 2011; Kite, Deaux, & Haines, 2008). Traits that are associated with males are typically more agentic such as (e.g., instrumentality, ambition, authority, and dominance) and have also been considered the basis for the prototypical leader (Epitropaki & Martin, 2004; Johnson et al., 2008; Lord, Brown, & Harvey, 2001). Lord et al., (2001) suggest that the traits that are more representative of female leaders are in direct contrast with those typical of male leaders, which could be an underlying reason why female leaders are not considered ‘prototypical’. Scott and Brown (2006) have claimed that the masculine behaviors (and therefore traits) can be inhibited for females

making it difficult for them to fit into the leadership prototype and may have important implication for how these prototypes may reflect their perceived ethicality (see also, Lord & Shondrick, 2011). It is therefore important to examine the role of gender when evaluating perceptions of leaders.

Based on what the research has demonstrated so far about the cognitive process of the leadership phenomenon, it seems evident that exposing perceives to leaders from different ethnic/gendered leaders should result in differential reactions in the activation of the leadership prototype. When examined through the connectionist lens, I therefore predict that responders will vary in important outcomes such as ethicality based on differences they perceive from ethnic/female leader to the "ideal" leader prototype. Since the content and activation of the leadership prototype is driven by the personal experiences of the evaluator, their demographic composition is also important to consider. Based on the previous research, female leaders should be seen as less effective and be distinct from the overall leader prototype. Furthermore, participants should prefer male leaders to female leaders based on the knowledge that they are less capable as male leaders (Lord et al., 2001). The current dissertation also seeks to understand if female leaders are also considered less ethical compared to male leaders.

Ethnic/Gender Composition of the Evaluator

Another question brought forth in this dissertation is the demographic composition of the person generating the leader prototype and the significance of this for the target leader's ethical evaluations. As indicated previously, the content of the leader prototype partially comes from the personal experience of an individual. Thus, the connectionist framework posits that different ethnic/gender participants will have

different leader prototype expectations because of their backgrounds. These background differences add additional stimuli for the participants to pull from when they are forming their prototype of the leader, extending their range of their leader prototype formation to be more inclusive of those with their own ethnicity or gender which may directly reflect their leader judgments. Their previous background and experience will speed the activation process of the leadership prototype resulting in differential leadership prototypes. This process can best be viewed through the lens of social identity theory and its effects on how individuals perceive others.

Group membership is one of the defining features people use to construct their sense of self or their self-esteem (Baumeister, 1991; Hogg & Abrams, 1988). This process is referred to as social identity theory (Branscombe & Wann, 1992; Hogg & Abrams, 1988), which finds that individual's strive to maintain a positive sense of self through their identification with their in-group members and by derogating out-group members. Previous research has demonstrated that highly identified individuals will reward or positively evaluate those that they perceive of as in their in-group (Branscombe, Wann, Noel, & Coleman, 1993). How these individuals decide in-group status is dependent on their identity formation. For example, if someone who is an actor is asked to rate a variety of people on different skills, they might assign higher ratings if one of the possibilities is another actor (Ellemers & Haslam, 2012). How they base their rating will depend on what group membership is important to them. To use the example further, if a female actor is asked to rate a wide variety of people, she may choose an actor if that option is there or she might rate female actors high if asked to rate a variety

of actors. Her rating of female actors might occur if her gender identity is something she considers important to who she is (Crocker, 2011; Tajfel, 2010).

A component of this social identity process is how much leeway a follower may give to a leader if they are an in-group member or are perceived of as an authentic leader. Hollander (1958) first described this leeway as an accumulation of positive impressions that create a level of status or an allowance of deviation from the expectancies of the group. These idiosyncratic credits increase the decision-making power and actions that a leader may take to go outside of the established norms of the group while minimizing potential sanctions from group members (Foti & Luch, 1992). These credits are more likely to accrue for leaders who are viewed as similar to and fitting within the group's prototype of leadership (Johnson & Lord, 2004; Livi & Kenney, Albright & Pierro, 2008). When there are no group norms or identity to rely on, social perception of who represent the prototype can shape who is offered idiosyncratic credits (Hogg, Fielding, Johnson, Masser, Russell & Svensson, 2006). Hogg and colleagues (2006) found that evaluators support and endorse leaders who belong to demographic categories they consider consistent with the groups prototype and were more likely to extend more idiosyncratic credits to these leaders than those who were seen as not consistent with the prototype. Furthermore, this study found that male leaders were considered less prototypical (evaluated unfavorably and extended less credits) for intuitive groups than analytical groups. While the reverse was true for females, they were considered less prototypical for analytical groups. These leaders were not allowed to deviate from the group norms to the same degree as the leaders who were considered prototypical.

These results indicate that the context and prototype match are important when evaluating minority/female leaders. It is currently unknown if by labeling ethnic/female leaders that will extend the same level of idiosyncratic credits as white male leaders. How will these leaders be rated in comparison to the prototypical leader and how will the surrounding context affect these evaluations? It is possible that due to the fact that minority and female leaders do not have the same leeway or credits as a White male leader (who is considered the prototype) that their rating will not be as high. Since all of the leaders in the current dissertation research will be described identically, any variation in responses that participants offer should be due to the match or mismatch between the prototype and the target leader.

There has been some dispute in the literature about the direction of the evaluative process for leaders based on the race and gender of the follower. For example, Bartol et al, (1978) found that ethnic background of the perceiver influenced leader evaluations when they shared a similar background. Additionally, Kraiger and Ford (1985) found in their meta-analysis that White subjects gave higher ratings to other White participants. Kraiger and Ford found that these effects were stronger in the field than in the lab. Finally, Bass (1990) found that Black leaders received higher evaluations from Blacks compared to Whites (see also, Bass, 2008). However, there have been studies that counter these findings. For example, Mount, Sytsma, Hazucha, and Holt (1997) found that Whites subordinates did not differ in their evaluations between White and Black bosses. Perhaps in this study, the minority participants were responding according to the societal expectation of leadership instead of their ethnic similarity with the target. Additionally, Hendrix (1998) found that Black graduate students were likely to question the credibility

and of Black faculty and provide lower rating for them compared to White faculty. Further, Rosette et al. (2009) found that participants of color (Asian, Hispanic and African American) demonstrated a bias in favor of White leaders. Previous research has also pinpointed that leadership ratings of prototypical leaders are general supported over non-prototypical leaders through (Hogg, van Knippenberg, & Rast, 2012). It therefore expands the current investigation of how evaluation own ethnicity will moderate how leader evaluations.

The gender composition of the leader evaluator is also important to investigate. For example, Wayne, Liden and Sparrow (1994) have found that same sex LMX (leader-member exchange) dyads are more likely to be more productive than mixed sex dyads (Green, Anderson, & Shivers, 1996). Furthermore, transformational leaders were also evaluated more highly by same sex evaluators than mixed sex evaluators (Powell, Butterfield, & Bartol, 2008). Evaluators may rely on the memories and expectation of their own behaviors and previous experiences that will influence how they perceive similar others. When examined through the connectionist lens, the ethnic/gendered background of the evaluator should influence who they judge to be a leader and evaluate those who share the same gender, same ethnicity as more ethical than those who have a dissimilar ethnicity or gender.

Ethical Leadership: Rating of a Leader's Ethicality

Typically, when forming a judgment about an individual's ethicality people primarily rely on what they say and how they behave as the judging criterion (Prottas, 2008). Traditionally, when people are engaging in actions or behaviors that are consistent with prior statements, values or expectations increases the likelihood that they will be

evaluated as ethical (Simons, 1999). Specific traits that ethical judgments have been linked to include trust, credibility, psychological contract (Davis & Rothman, 2006). Additionally, when we associate ethics and leadership, we consider how fairness, integrity, ethical guidance, people orientation, power sharing, role clarification, and concern for sustainability they are perceived to be (Kalshoven, Den Hartog, & Hoogh, 2011; Johnson, Daniels & Huff, 2001). It is possible that we offer more idiosyncratic credits to ethical leaders since we believe that they will behave with integrity. One of the questions that has yet to be established, which this dissertation seeks to answer is what types of ethical traits or characteristics are linked to ethnic/female leaders.

The current empirical research on ethical leadership is still nascent, and a thorough understanding has yet to be reached. However, research has shown that a leader who is characterized as loyal, courageous, responsible, obey their conscious, compassionate, dependable and reliable are regarded as ethical (Brown, Trevino & Harrison, 2006; De Hoogh, & Den Hartog, 2008). Furthermore, ethical leaders are seen as moral people who are also moral managers (Brown and Treviño, 2006; Treviño et al., 2003). Brown and colleagues (2005) define ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making" (p.120). This widely accepted definition encompasses both the leader's ethicality and the ethical enhancement of the followers. Specifically, ethical leaders are those who use their social power to positively represent of their organization and employees, by conducting themselves and reinforcing their subordinates about personal and professional ethically appropriate conduct.

These ‘moral managers’ actively manage ethical accountability in their subordinates by rewarding and sanctioning followers on their behavior (Brown et al., 2005; De Hoogh & Den Hartog, 2008; Gini, 1997; Resick et al., 2006). The distinction between ethics and morality is that morality emphasizes a layman theory of justice and is about the relative evaluation of behavior as it relates to contracts or promises between individuals (Kristol, 1978; Nozick, 1974; Rawls, 1971; Reidenbach & Robin, 1990). Ethical leadership, or focusing on ethics as it pertains to leaders, is about understanding the ethicality or integrity components of an individual and interpreting their intentions and actions on others (Rest, 1986; Treviño et al., 2006). At its roots, ethical leadership is about understanding how the person with power (the leader) wields that power to the benefit of others and in accordance with their ethical code (Ciulla, 2013).

Ethical leadership has been positively related to job performance, job involvement, and affective commitment in private and public sector managers (Cheng, Chou, & Farh, 2000; Khuntia & Suar, 2004). Zhu, May and Avolio (2004) speculate that ethical leadership affects follower’s organizational commitment and trust for leader primarily through the mediating mechanism of psychological empowerment. They believe that positive organizational outcomes such as commitment and trust occur when employees feel empowered, when they feel that their jobs have increased meaning. This in turn affects their self-efficacy, self-determination, and their belief that they contribute a broader impact to the organizations mission.

In addition to feeling empowered, followers with ethical leaders are more willing to engage in extra work effort, have higher satisfaction with the leader and rate the leader high in effectiveness (Toor & Ofori, 2009). Dadhich and Bhal (2008) empirically tested

the practical organizational outcomes (extra effort and effectiveness of the subordinate, and their satisfaction with the leader) associated with ethical leader as a result of high quality dyadic relationships (LMX; Graen & Uhl-Bien, 1995). They found that ethicality was a significant predictor of the practical outcomes. There are many positive outcomes that occur when a leader is considered ethical, including the long term promotion prospects of the leader (Rubin, Dierdorff & Brown, 2010), employee in-role and extra-role performance (Detert et al., 2007; Kalshoven, Den Hartog, & De Hoogh, 2011), their satisfaction with the leader and the follower's willingness to report problems (Brown et al., 2005), voice behavior (Walumbwa & Schaubroeck, 2009), ethical climate (Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009), perception of job characteristics, such as task significance, autonomy, and employee motivation (Piccolo, Greenbaum, Hardog, & Folger, 2010) and subordinate's trust and their affective and normative commitment (Den Hartog & De Hoogh, 2009).

An employee's ethical understanding and decision-making process are highly influenced by ethical leaders (Brown and Treviño, 2006), by creating ethical cognitions or ethical examples that provide a basis for behavior regulation (Hannah et al., 2012; Rest, 1986; Rottig et al., 2011). When others are in the presence of an ethical leader or are being influenced by them, they are able to retrospectively evaluate ethically related situations (Resick, Hargis, Shao, Dust, 2013). These leaders act as an ethical anchor through the process of social learning and sensemaking that enable them to make decisions that match the ethical leader's code of conduct (Bailey & Spicer, 2007; Reidenbach &Robin, 1990). In fact, Resick and colleagues (2013) found in their investigation of ethical leadership and employee ethical cognitions that in the presence of

these ethical leaders, the employees formed more stringent understanding of the ethically appropriate behavior compared to employees who were not in the presence of ethical leaders.

The Brown et al., (2005) definition is extremely useful for understanding a leader's ethicality when there is a direct behavioral interaction between leaders and their subordinates or observers. Indeed, most of the ethical leadership research has investigated the direct consequences of ethical leadership. Unfortunately, what is unclear is how ethicality perceptions are affected when followers have limited interactions with a leader. Based on what we know of the connectionist process, it seems reasonable to predict that people will evaluate value laden characteristics of a leader such as ethicality based on previous experiences, their own ethnic groups expectations and by what the societal expectation of the CABs of a prototypical leader and there will be differential impressions of the leader based on the leaders ethnic and gender composition.

The Ethnic Ethical Leader

This dissertation puts forth the theory (see Figure 2), that the ethnicity and gender composition of the leader will have a direct effect on the perceived ethicality of the leader as a result of the underlying connectionist framework that occurs when a perceiver is exposed to certain leadership characteristics. This theory has never before been suggested and the testing of this moderating mechanism to explore the impact of the ethnic/female leadership prototype is a new addition to the extant literature (both the leadership and diversity literature). This study will help to extend the current research on both minority leaders and female leaders by understanding how they compare to a "prototypical" leader. Additionally by considering the context (such as type of job) in which this leader

is situated can either enhance or inhibit how these leaders are evaluated. By utilizing a connectionist framework to understand ethnic/female leaders, I hope to gain a more detail understand of evaluations of ethicality. Of additional importance is also the role of the participant or evaluators own ethnic/gender composition and how it might moderate perceptions of leadership ethicality. As the workplace becomes increasingly diverse, it also becomes increasingly important to understand the compounded impact of gender and ethnicity on our evaluations of leaders and since ethics has become a more prominent focus, this dissertation represents an important contribution to achieve this.

Overview of Studies

Based on the connectionist model of leadership, differential leadership perceptions may be explained by the activation of slightly different leadership prototypes. Specifically, commonly held beliefs about the typical characteristics, attributes, and behaviors (CABs) of White males may be more consistent with the content of the normative leadership prototypes in the USA than the CABs of minority group members and women (Biernat & Kobrynowicz, 1997; Foschi, 1996; Heilman & Haynes, 2005; Lord & Shondrick, 2011; Ritter &Yoder, 2004; Sy et al., 2010). Therefore, if the typical CABs of White males overlap with the content of the normative US leader prototype, then White Males should be categorized and rated highly as leaders compared to ethnic and female counterparts. Further, I hypothesized that one consequence of categorizing someone as a leader is that the person is imbued with ethicality, thus White males should be perceived to be more ethical than their ethnic and female counterparts. Additionally, the evaluators own ethnicity and gender is believed to play a role in the content of the leadership prototype activation and subsequent ethical evaluations. Finally, I

hypothesized that the leadership prototype activation will also be affected by situational context.

This dissertation consists of four studies. In study 1, a representative pool of traits and characteristics regarding different ethnic/female leaders was generated and compared to a non-leader category. In study 2, the traits and characteristics that produce the normative prototypical leader were compiled and compared to the CABS assigned to an ethnic/gender leader and participant's responses on several dependent measures (ethicality, general leader perceptions, and effectiveness) were collected. In study 3, a reaction-timed test was utilized to evaluate responder's implicit ethical attitudes towards ethnic/gender and prototypical leaders as a method of removing bias that may be present with more explicit measures. In study 4, to test the role of context in the activation of the ethical ethnic/gender leader prototype survey was utilized.

Chapter 2: Method

Study 1

Purpose

To compare leaders on important outcomes such as ethicality and effectiveness it is first important to identify what spontaneously comes to mind when describing ethnic/female leaders. The purpose of Study 1 was to generate a comprehensive and representative list of characteristics, attributes, and behaviors (CABs) associated with leaders who vary in terms of ethnicity and gender. The purpose of developing this list is to understand how ethnicity and gender affect expectations about leadership as well as gain a better understanding of how these types of leaders differ from non-leaders. Once the list of CABs was generated, a new group of participants rated the CABs in terms of

their prototypicality for the different types of leaders (i.e., prototypicality ratings of CABs for leaders differing in ethnicity and gender). Finally, an additional purpose of this study was to gather a list of CABs for an ethical person. This study laid the groundwork for establishing the full set of CABs for the leadership category and in particular for leaders that vary in ethnicity and gender (see Figure 2). This information sets the stage for discerning any possible discrepancy between a potential leader target and the follower's leadership prototype. Without this study, it would be difficult to distinguish between the ethnic/female leaders and the leader prototype because we would be unaware of the full range of stimuli these leaders have in common or on which CABS they differ. This study will also establish which CABs are crucial for the leader and nonleader categories and if the ethnic/female leaders are considered closer to the overall leader or nonleader category.

Hypothesis 1: The characteristics, attributes, and behaviors obtained for the White male leader will differ from those of ethnic minority male/female leaders.

Participants were recruited through Amazon's Mechanical Turk®, a website marketplace. This site allows individuals to be paid to complete tasks/experiments. The benefit of using this website is that participants have a wide range of ethnicities, age, gender and socio-economic status, which increases the variance of responses for this study. The payments for participants can range from $.10 to $1.00 and upwards depending on the nature of the task. Buhrmester, Kwang and Gosling (2011) recently investigated the effectiveness of Mechanical Turk and found that the level of motivation and the quality of the data is on par with traditional data psychological collection methods (e.g. student samples). Furthermore, Paolacci and Chandler, (2014) found that

the characteristics that make up the participant pool for Mechanical Turk are more variable for research studies than typical student samples.

Study 1a

Participants

A total of 90 participants were recruited through Amazon's Mechanical Turk®. In terms of their ethnicity, 49 participants self-identified as White/European American or Caucasian (54.4%), 9 were Asian (10%), 8 were Black/African American (8.9%) and 3 were Hispanic/Latino (3.3%). The sample was comprised of more women (42, 46%) than men (30, 33.3%), with 18 individuals not indicating their gender. For educational attainment, 20 participants indicated that they had received a maximum of a high school diploma (22.2%), 13 had an Associate's degree (14.4%), 30 had a Bachelor's degree (33.3%), and 11 had a Graduate degree (12.2%). Participant age also varied; 4 were under age 20 (4.4%), 25 were age 20-29 (27.8%), 13 were age 30-39 (14.4%), 7 were age 40-49 (7.8%), 14 were age 50-59 (15.65) and 7 were age over 60 (7.8%). Participants were paid on average $0.40 and took approximately 30 minutes to complete the study.

Procedures

This study employed a mixed factorial experimental design with 3 between subject factors and 2 within subject factors. In particular, the between subject factors consisted of a 2 level Leader-Gender (Male, Female), a 3 level Leader-Race (Black, White, Hispanic), and a 6 level nonleader job positions (Actor, Musician, Nurse, Factory worker, Sales Person, Union Member) manipulations. The within-subject factors were a "Gender/Race Leader" repeated measures (i.e., each participant were randomly exposed to three of the six possible Gender and Race Leader combinations), and a "Nonleader"

repeated measures (i.e., each participant were randomly exposed to two of the six possible nonleader conditions).

Participants were asked to provide up to 20 descriptors (CABs) each for 3 types of leaders and 2 nonleaders. They were told that this study was designed to gather information about what they perceive as essential for a leader by listing the CABs that first came to mind with regard to the leaders/nonleaders. To help generate these descriptors, they were given an example of an inanimate object such as a tire, and told that the potential descriptors would be round, black, attached to a vehicle, rubber, wide, durable, tread, bouncy, etc.

Participants were given 5 minutes to generate as many CABs as they could think of (15 minutes total for the 3 leaders) and were offered a bonus ($.25) if they were able to generate 20 unique traits for 2 out of the 3 different leaders. They were informed that they had to provide complete words and that their work would be screened for incomplete or nonsense words. They were also asked to list potential jobs and names that would suit the ethnic/gender leaders. This information was used in subsequent Studies 2 and 4. Each participant was also asked to generate as many descriptors (up to 20, offered no bonus) as they could think when describing an ethical person. This data was used in Study 3 for the implicit measure. Participants then completed demographics: gender, age, race, education, socio-economic status, previous leadership experiences-negative and positive, and their work history. Finally, participants were debriefed (see Appendix A).

Analysis

Content Coding of CABs. After obtaining all the words generated in Study 1a, I first edited the list of CABs. In particular, I needed to eliminate duplicate and

synonymous words and identify only unique CABs. I had 7 coders assist with this task. Specifically for each ethnicity/gender leader and nonleader condition, 2 independent coders went through the data file and deleted duplicates, phrases and inappropriate words[3] that could not be considered descriptors.

The content coding of the CABs proceeded as follows. First, for each category of ethnic/gender leader or nonleader, all of the attributes that were generated by the participants were grouped together on the basis of similarity (e.g., intelligent and smart). A thesaurus was used to assist in identifying synonyms. If words were similar yet still considered distinctly different (e.g., intelligent vs. knowledgeable vs wise), each word was retained. Retention of these similar yet distinct words required that both coders indicate that the words should not be combined. Any disagreements between coders were settled by the primary researcher who made the final decision about the semantic similarity of the two words.

Once each word belonged to one and only one semantic category, a final coder reviewed the entire set and determined if each category was sufficiently distinctly from other categories. Once the categories were determined to be sufficiently distinct, an exemplar word was then chosen to represent each category. Consistent with Lord et al. (1984), exemplar words were chosen as a function of how many participants mentioned the word. A minimum of one third of the total participants had to mention a word for it to be considered the exemplar of a category. A total list of CABs was then created by merging the lists across the 12 conditions. Once again, any duplicates were eliminated. This resulted in a master list of 355 unique CABs (see Table 1). Once this master list was created, 2 independent coders assessed the frequency that each CAB was mentioned by

each participant in each condition. If a CAB was mentioned by a participant, the coder assigned a 1 to the CAB. They would assign a 0 if it wasn't mentioned by that participant.

Family resemblance and cue validity analyses. I used the formulas provided in the Lord, Foti and De Vader's (1984) paper to compute family resemblance and cue validity of the final list of CABs. Specifically, a family resemblance (FR) score for each CAB was created by using Equation 1.

$$FR_{CAB} = \sum_{j=1}^{n} \frac{a_{CAB*j}}{n} \quad (1)$$

In this equation, "a" represents whether each CAB was mentioned by a particular participant in a particular condition, "j" represents the particular participant providing the CABs, and "j" goes from 1 to "n" where "n" represents the number of participants in that condition. Thus, family resemblance is roughly the average number of times that a CAB was mentioned in a particular condition. Lord et al., (1984) argue that this measure provides information about how distinct the overall category (e.g. the "leadership" category) is by creating a ratio of family resemblance score across the categories, (see Table 2).

Cue validity represents the distinctiveness of the various conditions (e.g., black male leader, white female leader, and nonleader) across all the CABs. It is created by using Equation 2.

$$CV_{condition} = \left(\frac{1}{m}\right) \frac{FR_{CAB}}{\sum_{i=1}^{m} \frac{FR_{CAB}}{m}} \quad (2)$$

In this equation, "m" represents the total number of unique CABs (i.e., m=355) and "i" represents the particular CAB being considered. The "i" subscript varies from 1 to m, (see Table 2). Both the family resemblance and cue validity help determine which CAB

represents which leaders and the degree to which the CAB differentiates leaders from non-leaders.

Results

Using the master list, the scores from the family resemblance and the cue validity scores, 4 words were deleted due to zero mention by one third of the participants (Lofty, Uncultured, Underprivileged, and Unfortunate). The zero scores indicated that they were not considered part of the leader or nonleader categories.

The family resemblance scores identified 12 words that had a family resemblance of 0 and thus, not belonging to any leader category (Introspective, Law-abiding, Low Income, Moody, Perfectionist, Safety-Conscious, Saintly, Samaritan, Underachiever, Vivacious, Weary). Lord et al. (1984) used a 40% inclusion cutoff to identify critical CABs for a particular category. The only attributes that met this criterion with regard to the leadership category were Strong and Intelligent. When comparing whether these descriptors were part of the leader category for the different races and genders, the rank order of family resemblance scores for strong were as follows: White, Female, Black, Male, then Hispanic. The rank order of family resemblance scores for intelligence was as follows: Black, Male, White, Female, and then Hispanic. For the nonleader category, both of these words failed to meet the Lord et al (1984) cutoff. Indeed, no words met Lord et al. (1984) cutoff for the nonleader category. When I lowered the cutoff to a 25% inclusion rate, the two highest words for nonleader were Intelligent and Hardworking.

Lord et al. (1984) correlated the family resemblance and cue validity estimates of their CABs and reported a positive relationship between the two characteristics. Namely, the higher the family resemblance of the CAB, the greater the likelihood that the CAB

differentiated the leader category from the non-leader category. I replicated this analysis and found that leader family resemblance was positively correlated with leader cue validity, $r = .21$, $p < .05$. This positive relationship was replicated even when the family resemblance scores for a particular ethnic/gender leader were correlated with overall leader cue validity (see Table 3). As can be seen from this table, while leader cue validity was positively correlated with the ethnic/gender family resemblance scores, the correlation coefficients are not as high as they were with the overall leader category. Additionally, when the ethnic/gender family resemblance scores were correlated with the same ethnic/gender leader cue validity scores, the relationships were not significant (except for the Male leader condition, see Table 3).This finding confirms that cue validity provides information regarding the distinctiveness between the overall leader and nonleader categories and does not provide meaningful information regarding the distinctiveness of subcategories of types of leaders from each other.

Moreover, Table 3 shows that the overall leader family resemblance scores and the ethnic/gender family resemblance scores are strongly positively correlated (i.e., correlations ranging from .92 to .96). Similarly, the overall leader cue validity was positively correlated with the cue validities of the specific ethnic/gender leader categories, see Table 3. Therefore, the distinctiveness of the leader category was strongly positively related to the cue validity scores of each separate ethnic/gender leader category. Finally, Table 3 shows that the nonleader family resemblance and nonleader cue validity scores were exhibited only weak correlations with the family resemblance and cue validities for the various ethnic/gender leader categories. Overall, these findings support that the obtained CABs successfully differentiate between leaders and

nonleaders. However, the results also suggest that the obtained CABs do not differentiate among the different types of ethnic/gender leaders. This finding is contrary to my original hypothesis, but more information about the distinction between the leaders and the CABS that were generated are needed to fully examine how individuals differentiate between the ethnic/gender leaders.

In Study 1b, I collected additional data from a new set of participants to see if the CABs could distinguish among the various types of ethnic/gender leaders. Specifically, in this additional study, participants rated the leader prototypicality of these CABs for different ethnic/gender leaders.

Study 1b

The purpose of Study 1b was to present the master list of CABs to a new group of participants and have them rate the prototypicality for the different ethnic/gender leader types. This study was also designed to explicate Hypothesis 1 in more detail. Specifically, I predict that the prototypicality of the CABs for the overall leader category will be strongly similar to the prototypicality ratings of the CABSs for White male leaders. Additionally, communal or spiritual CABs will be viewed as more prototypical for the ethnic/gender leader compared to White male leader.

> *H1a: The traits of intelligent, agentic, dominant, and assertive will be more prototypical for White male leaders than any of the other ethnic-gender leader combinations.*
>
> *H1b: Communal, warm, interdependent and caring traits will be more prototypical of female leaders than White male leaders.*
>
> *H1c: White male leaders will receive the lowest ratings on religious, spiritual, and interdependent traits as compared to all other ethnic/gender leaders.*

Hypothesis 2: White male Leader traits will be viewed as more similar to those of the typical "ideal leader" than will the similarity of traits of the other ethnic-gender leader combinations with the typical "ideal leader."

Participants

A total of 505 participants were recruited through Amazon's Mechanical Turk® for Study 1b.There were 372 participants that self-identified as White/European American or Caucasian (52.5%), 51 were Black/African American (7.2%), 34 Bi/Multi-racial (5.5%), 29 were Asian (4.1%), 19 were Hispanic/Latino (2.7%). In terms of gender, 270 (34.3%) were female, 244 were male (38.1%), and 195 did not provide gender information. In terms of highest educational degree obtained, 154 had a maximum of a high school diploma (21.7%), 79 had an Associate's degree (11.1%), 190 had a Bachelor's degree (26.8%), 75 had a Graduate degree (10.5%). In terms of age, 14 participants were under age 20 (2%), 189 were age 20-29 (26.7%), 136 were age 30-39 (19.2%), 79 were age 40-49 (11.1%), 58 were age 50-59 (8.2%) and 32 were age over 60 (4.5%). Participants were paid on average $.40 and took approximately 35 minutes to complete the task.

Procedures

Similar to Study 1a, this study employed a mixed factorial design with 3 between subject factors and 1 within subject factors. In particular, the between subject factors consisted of a 2 level Leader-Gender (Male, Female), a 3 level Leader-Race (Black, White, Hispanic), and 6 level nonleader job positions (Actor, Musician, Nurse, Factory worker, Sales Person, Union Member) manipulations. The within-subject factors were a "Gender/Race Leader" repeated measures (each participant were randomly exposed to two of the six possible Gender and Race Leader combinations).

Participants were informed that they would be evaluating whether specific CABs were consistent with their ethnic/gender leader prototype. Specifically, they were asked to rate as quickly as possible to each CAB using their "gut instinct" about whether the descriptor fit their image of a type of ethnic/gender leader. To reduce potential fatigue, each participant rated 80 randomized CABs (out of a total of 350) for 2 types of leaders and 1 nonleader. Consistent with the Lord et al. (1984) methodology, prototypically was rated on a 5-point scale from "*fits my image very well*" = 5 to "*does not fit my image at all*" = 1. After completing this task, they provided demographic information with regard to age, race, gender, socio-economic status and their previous work and leadership experience. All participants were then debriefed; see Appendix B for the full survey.

Results

To understand how participants evaluated the ethnic/gender leaders and nonleader on the full list of CABs, each leader/nonleader condition was partitioned to only the participants in that condition. Using Microsoft Excel, we then averaged across the participants to get a mean score for each CAB for a particular ethnic/gender leader condition. Additionally, I averaged the data across the various ethnic/gender leader conditions so that I had an average leader prototypicality rating for ethnic leaders (i.e., White, Black, and Hispanic) as well as average leader prototypicality ratings for the two gender leaders (i.e., male, female). The prototypicality ratings for the 6 nonleader conditions were averaged into a single "nonleader" condition. This analysis allowed me to determine how the prototypicality ratings vary at the subcategorical leader level (e.g., Black Male Leader) as well at the higher order gender or higher order race as well as the overall leader level. Table 4 shows the results of this analysis.

As can be seen from this table, rating of prototypicality across all of the CABs for the Black, White and Hispanic leader condition were not statistically significantly different from the overall leader condition (*t*-tests *p*-values > .05). Additionally, each of the race leader conditions were not significantly different from each other (*t*-tests *p*-values < .05). However, the prototypicality ratings for these different ethnic leaders were significantly different from the nonleader conditions (*t*-tests *p*-values < .05).

In terms of leader gender, the mean prototypicality ratings of the Male leader (*M* = 3.15) condition was statistically significant different from both the overall leader (*M* = 3.21) and the nonleader conditions (*M* = 3.09) (*t*-tests *p*-values >.05). However, the prototyicality of female leaders were only significantly different from the nonleader condition ($t\ (505) = 4.58$, $p > 0.001$) and not from the overall leader condition ($t\ (505) = 1.69$, $p > .05$), see Table 4. Finally, the average prototypicality ratings of Male leaders (*M* = 3.15) were significantly different from the prototypicality ratings for the female leaders (*M* = 3.27) ($t\ (505) = 3.15$, $p < 0.001$).

For a more detailed understanding of how each of the 350 CABs differentiated among the 6 ethnic/gender leaders, an Analysis of Variance on each CAB[4] was conducted. The results of these analyses are presented in Tables 5, 6, 7, and 8. With these tables, I was able to test whether the prototypicality of the CABs actually differed for leaders as a function of ethnicity and/or gender. Table 7 provides the list of CABs that exhibited a significant race by gender interaction on CAB prototypicality. As can be seen in this table, there were 127 CABs whose prototypicality significantly differed for particular combinations of ethnic/gender leaders. These findings support the connectionist theory hypothesis that the most salient CABs of the leadership schema

change as a function of contextual information provided about the leader (i.e., ethnicity/gender demographic of the leader).

To formally test Hypotheses 1a to 1c, I needed to create a set of CAB scales that were equivalent in terms of prototypicality for all the ethnic/gender leader conditions. Table 9 provides the list of CABs that were not statistically different across the ethnic/gender leaders (57 CABs) along with 172 CABs that were nonsignificantly different in prototypicality between the leader/nonleader conditions. I performed a content analysis to classify these equivalent CABs into global categories (e.g., agentic, communal, religious) stipulated in Hypotheses 1a to 1c. Specifically, this content analysis was performed by 4 independent raters who classified each CAB into one of 3 categories: Agentic CABs (e.g., competent, confident inventive, etc.), communal CABs (e.g., accommodating, collaborative, and connected) and religiosity CABs (e.g., appreciative, compassionate, and harmonious), see Table 10 for the full list for each composite. Three out of the 4 raters had to classify the CABs into the same global category for it to be included in this scale construction process.

After identifying the CABs that fell into each of these CAB composite variables, I estimated the reliability of the three CAB composite variables using the Spearman-Brown prophecy formula, which is specified in Equation 3.

$$\rho_{xx'} = \frac{k * \bar{\bar{r}}_{xx'}}{(1-k)\bar{\bar{r}}_{xx'}} \tag{3}$$

In Equation 3, $\rho_{xx'}$ represents the reliability of the new composite scale, k represents the number of items in the scale, and $\bar{\bar{r}}_{xx'}$ represents the average correlation among the CABs included in the composite. Based on this formula, the reliability for the Agentic CABs

composite was estimated to be .99, for the Communal composite, the reliability was estimated to be .97 and for Religiosity composite, the reliability was estimated to be .99.

Hypothesis 1a predicted that White males would be rated as more prototypical on agentic CABs than the other ethnic/gender leaders. To test this hypothesis, a one way ANOVA between leader conditions on the Agentic CABs composite variable was conducted. There was a significant difference between the leaders, $F(5, 1284) = 9.86$, $p < .001$, $\eta_p^2 = .027$, (see Table 11). To understand whether my specific directional hypothesis was supported, I followed the overall ANOVA with the post-hoc Least Significant Difference (LSD) test. The LSD test revealed that the significant ANOVA was due to the following rank order on the Agentic CABs: White Female leaders ($M = 3.85$) > Hispanic Female leaders ($M = 3.64$) = Black Male leaders ($M = 3.55$) = Black Female leaders ($M = 3.52$) = White Male leaders ($M = 3.48$) > Hispanic Male leaders ($M = 3.31$). Contrary to Hypothesis 1a, White females were actually rated the highest in agentic CABs. Hispanic females, Black Males, Black Females and White Male leaders were equivalent in terms of Agentic CABs. Finally, Hispanic males were found to be the lowest on agentic CABs. Hypothesis 1a was therefore not supported. White females as opposed to White Male Leaders were rated the most agentic. In fact, White Male Leaders were equivalent to almost all other ethnic/gender leaders,

Hypothesis 1b predicted that female leaders would be rated more prototypical on communal CABs than White male leaders. To test this hypothesis, a one way ANOVA was conducted in which the effect of ethnic/gender leader condition on the communal CABs composite score was conducted. Consistent with the hypothesis, a significant difference between the ethnic/gender leaders was found, $F(5, 1284) = 12.76$, $p < .001$, η_p^2

=.039, (see Table 12). However, the LSD test revealed the following significant differences among the ethnic/gender leader groups: White Female leaders (M = 3.61) = Hispanic Female leaders (M = 3.63) > Black Male leaders (M = 3.40) = Black Female leaders (M = 3.39) = Hispanic Male leaders (M = 3.31) > White Male leaders (M = 3.12). Consistent with this hypothesis, White females and Hispanic Female leaders were rated as the highest in communal CABs. While Black Males received the next highest rating, Black Females were not significantly different in their ratings from this group. Finally, White Males received the lowest ratings on communal CABs. This ordering of the ethnic/gender leader conditions is supportive of Hypothesis 1b. Females tend to be higher on communal CABs than males are.

Hypothesis 1c predicted that White Males would receive the lowest ratings on religious CABs than all other ethnic/gender leaders. To test this hypothesis, a one way ANOVA between leader condition and religious CABs was conducted. There was a significant difference between the leaders, $F(5, 1284) = 12.09$, $p < .001$, $\eta_p^2 = .034$, (Table 13). The LSD test revealed the following rank order for religious CABs: Hispanic Female leaders (M = 3.64) = White Female leaders (M = 3.62) > Black Male leaders (M = 3.39) = Black Female leaders (M = 3.39) = Hispanic Male leaders (M = 3.32) > White Male leaders (M = 3.12). Thus, Hypothesis 1c was supported. Specifically, Hispanic Female received the highest rating and they were equivalent to White females leaders. Black Males, Black Females and Hispanic Male leaders were next in terms of religious CABs and these groups were equivalent to each other. Finally, White males were significantly lower in religious CABs ratings than any other group.

Hypothesis 2 predicted that White Male leaders would be rated as the most similar or prototypical compared to the overall leadership category. These results, coupled with the family resemblance score ratings from study 1a that showed that there was no significant differences between the race or gendered cue validity scores, indicate that Hypothesis 2 is not supported.

Discussion

Study 1 generated a substantial list of CABs and investigated how prototypical these CABS were for ethnic/gender leaders. This study found that there were CABs that significantly varied in prototypicality on the basis of ethnic and gender leader context. Additionally, this study found significant interaction between race and gender on these CABs. Combining these CABs into meaningful composite variables such as agentic, communal and religiosity revealed the rank ordering of how participant evaluate different ethnic/gender leaders on these variables. Interestingly, this study found that White females received the highest agentic CAB composite scores. In contrast to the existing leadership literature on gender, which finds that males are perceived to be more agentic than females, the present results suggest that a change in leader perceptions, at least with regard to White Female leaders, might have recently occurred.

In more of the expected direction, female leaders (White and Hispanic leaders) were rated highest in communal/ relational characteristics as well as religious characteristics. As expected, of all of the leaders, white males were seen as being the lowest in communal or religious CABs.

Generally, the present study replicated the original Lord et al., (1984) study which distinguished between an overall leadership category and a nonleader category. The

present study goes beyond the Lord et al. (1984) study in that the demographic context of leadership was explored and specification of the differences in leader schemas as a function of ethnic/gender context was obtained. These results are supportive of the connectionist framework underlying this dissertation.

In the next study, a direct test of how leaders are evaluated is examined by exposing participants to a resume that varies only in the ethnicity and gender of the leader. It is hypothesized that the ratings of participants will vary as a function of ethnicity and gender information about the leader. However, before discussing the details of the next study, I will discuss the pilot study that was conducted to create the stimuli for the subsequent studies.

Stimuli Pilot Study

In the studies that follow, I will be using pictures of individuals, and identify them by name and occupation. This pilot study was conducted to ensure that the pictures only differed in terms of race and gender of the depicted person and not in terms of other characteristics (i.e., age, attractiveness, likeability). The names and occupations were collected to ensure that they were equally appropriate across conditions. A convenience sample of 32 graduate and undergraduate students participated in this pilot study.

The pictures of the various leaders were selected using a google image search for leaders in business attire. Images were only selected if they depicted an individual wearing professional attire and a friendly demeanor (smiling). To keep the faces neutral and reduce bias as much as possible, the photos were cropped at the shoulder and were given the same grey background using a freeware program called Gimp. Additionally, any color photos were converted to black and white using Adobe Lightroom editor.

The names and occupations were generated by the participants in Study 1a. Each participant was asked to provide up to 5 names and 5 occupations for each ethnic/gendered leader. The names/occupations that were mentioned the most frequently across all participants were used in this pilot study. A final list of 5 names were chosen from this list after reviewing all the results for every ethnic/gender leader combination. Pilot study participants rated each name and occupation in terms of how well they fit with their image of the ethnic/gendered leader. See Appendix C for the pilot survey with the photos, names and occupations.

The results of this study indicated that the pilot study participants perceived the images to be nonsignificantly different in terms of age, attractiveness, and likeability (*t-test's* >.05 between the different leaders).

Study 2

Purpose

The aim of Study 2 was to verify that the CABs gathered from Study 1 would garner differential reactions from participants for the different ethnic/gender leaders. Based on previous studies with similar paradigms it was expected that participants would have differential reactions to a resume and evaluate the leaders differently (Bertrand & Mullainathan, 2004; Moss-Racusin Dovidio, Besoli, Graham & Handelsman, 2012). Bertrand and Mullainathan (2004) found that changing the name of the applicant to a stereotypic Black or White name affected whether the applicant would be hired (see also Milkman, Akinola & Chugh, (2014) for a recent study on minority and female mentorship requests). Moss-Racusin and colleges found that when sending an application for a lab manager position to faculty members, the male name was judged as more competent and hirable and was offered a higher starting salary than female applications.

Specifically, I asked participants to review a resume that had a picture of the leader attached. The content of the resumes were identical. The only manipulation was the picture, name and contact information attached to the resume. Based on the previous research, I predicted that participants would evaluate White Males more positively than to other ethnic/gender combinations. This study added to Study 1 by evaluating the impact of the ethnicity and gender characteristics of the leaders (see Figure 2), on important outcomes even though the resume indicated that the person had important leader CABs. The outcomes that were examined were participants' ratings of leader ethicality, general leader impressions (GLI), and effectiveness. This study also determined if participants believe that female leaders while ethical are not desirable as an immediate supervisor

Hypothesis 3: The average prototypicality ratings of the traits associated with the White Male leader will be higher than the average prototypicality ratings for the other ethnic-gender leader combinations

Hypothesis 4: White Male leaders will have higher effectiveness and GLI ratings than the other ethnic-gender leader combinations.

Hypothesis 5: Once the average prototypicality is controlled for, there will be no difference between White Male leaders and other ethnic-gender leaders on effectiveness and GLI.

Exploratory Hypothesis 1: If White Male leader are considered the "ideal" leader they should be rated higher in terms of ethicality than other ethnic and gender leader combinations, however Female Leaders may be seen as more warm or interdependent and thus be considered more ethical than males.

Hypothesis 6: After controlling for ethicality, female leaders will still be significantly lower in terms of desirable as immediate supervisor than will male leaders.

Participants

A total of 309 participants were recruited through Amazon's Mechanical Turk®. There were 214 participants that self identified as White/European American or Caucasian (69%), 29 were Black/African American (9%), 17 were Hispanic/Latino (5.5%), 16 were Asian (5.1%), and 7 were Native American (2.1%). While I have reported the full racial background of the participants, in my analysis I only utilized the results from the Black, White and Hispanic participants. The reason for this is to fully understand how minorities react to leaders of their own racial group[5]. In terms of gender, 147 were female (40%) and 126 were male (47%). In terms of educational attainment, 86 indicated that they had received a minimum of a high school diploma (32%), 40 had an Associate's degree (15%), 99 had a Bachelor's degree (36%), and 42 had a Graduate degree (15%). There were 6 participants that were under age 20 (2%), 83 were age 20-29 (26.7%), 42 were age 30-39 (19.2%), 34 were age 40-49 (11.1%), 25 were age 50-59 (8.2%) and 13 were age over 60 (4.5%). Participants were paid on average $.30 and took approximately 20 minutes to complete the task.

Procedures

Study 2 employed a 2 (Leader Gender: Male, Female) X 3 (Leader Race: Black, White, Hispanic) between-subjects experimental design. Participants reviewed a resume and responded to their "gut instinct" reactions to the leader. The participants were randomly assigned to review a resume that was identical for all of the leaders except for the name, email and picture in the heading of the resume (see Appendix D for example). The content of the resume was obtained by conducting a Google search. The obtained resume was edited to eliminate any potential occupational context or pronouns that might

influence the participant. The job description was vague and the list of tasks and skills were those that might belong to any supervisor (project management, excellent oral and written communication, see Appendix D for an example resume).

Participants then rated how prototypical the leader was on a subset of CABs (40 words total) obtained from Study 1b. These 40 CABs were identified by comparing the average prototypicality ratings for the overall leader category as well as the average prototypicality ratings for each ethnic/gender leader, on ratings of prototypicality for each of the 350 CABs. Only CABs that were within one standard deviation of the overall leader average rating were retained (see Table 14 for the list of 40 words). The majority of the retained CABs (75%) were rated within one standard deviation of the overall leader category across all 6 ethnic/gender leader categories. However, 10 CABs were kept (Bold, Diligent, Ethical, Independent, Likeable, Persuasive, Sharp, Thoughtful, Vigilant, and Well-dressed, see table 14 for which leaders) because they were within the one standard deviation rule for 5 of the 6 ethnic/gender leader combinations.

Participants then completed the dependent measures (promotion recommendation for the leader, perceptions of enjoyment working with or for the leader, ethicality, GLI, effectiveness, political orientation and an intolerance measures), and demographics. As a check of the Study 1a results, I also asked these participants to provide any additional descriptors they could think of for the leader (up to 10). After providing this information, all participants were debriefed.

Measures

Leader Prototypicality. To create a leader prototypicality scale with the CAB items identified in Study 1, I used a maximum likelihood exploratory factor analysis with

a varimax rotation. I used Kaiser's (1960) rule to determine the number of factors to retain in this analysis. The analysis indicated that three factors had eigenvalues greater than one. A varimax rotation was performed and the three rotated factors explained 25.2%, 19.7%, and 13.6% of the variance respectively. Table 15 shows the rotated pattern matrix for the solution. To create three "clean" composite scores (i.e., items with high loading on only one factor), I only kept CABs that had a factor loading over .40 on their primary factor and had at least a .25 loading difference between the primary factor and the other two factors (Kim & Mueller, 1978).

The first factor consisted of 13 CABs and seemed to represent an overall leadership category (for example, Intelligent, Responsible, Leader, see Table 15). Therefore, this composite will be hereafter referred to as Leader CABs. The Cronbach's alpha for this composite was .95. The second factor consisted of 10 CABs and seemed to indicate a communal or relational orientation (for example, Family-Orientated, Respectful, Approachable, see Table 15). Therefore, this composite will be hereafter referred to as Relational CABs. The Cronbach's alpha for this composite was .92. The final factor consisted of 4 CABs (Powerful, Bold, Influential and Assertive) and seemed to represent a level of power for the leader category. Therefore, this composite will be hereafter referred to as Power CABs. The Cronbachs alpha for this composite was .85.

Ethicality of the Leader. This construct was measured using the ten-item measure developed by Brown et al., (2005). An example of this item is "Conducts his/her personal life in an ethical manner" with 1 = *highly unlikely* and 7 = *highly likely*. A confirmatory maximum likelihood factor analysis was conducted on this scale using Mplus version 5.21 (Muthen & Muthen, 2007). A one-factor model fit the data well (χ^2

(35) = 57.52, χ^2/df = 1.64, RMSEA = 0.06, CFI = 0.97). In terms of fit, the χ^2 /df ratio was below the recommended cutoff of 3, the RMSEA was below the accepted cut-off of 0.08, and the CFI was above the accepted cut-off of 0.90 (Hu & Bentler, 1999). The factor loadings for the items were acceptable, with all items loading above 0.40 on the factor, See Table 16. The Cronbach's alpha for this scale was 0.93.

General Leader Perceptions and Leader Effectiveness. To understand the participant's overall perception of the leader, the General Leader Impression scale was used (Cronshaw & Lord, 1987; Lord, 1977). An example of this item is "How typical of a leader is BLANK?" This scale consists of a 5 item measure with a six-point Likert-type scale, with 1 = *not at all* and 6 = *very much so.* Bass, Avolio, Jung and Berson's (2003) scale was used to measure participant's perceptions of leader effectiveness. An example of this item is "How effective do you believe this leader will be at achieving work objectives?" This scale consists of a 3 item measure with a 5 point Likert scale, with 1 = *not at all* and 5 = *very much so*.

Due to the similarity in the underlying construct (leader effectiveness) of these two scales, I conducted a confirmatory factor analysis to determine if the two scales could be separated from one another. Using Mplus version 5.21 (Muthen & Muthen, 2007), a confirmatory maximum likelihood factor analysis using a two-factor model fit the data acceptably well (χ^2 (19) = 70.31, χ^2/df = 3.7, $p < 0.05$, RMSEA = 0.04, CFI = 0.92). Unfortunately, the chi-square test was significant and the χ^2 /df ratio was above the recommended cutoff of 3. The other fit indices were within the acceptable levels, the RMSEA was below the accepted cut-off of 0.08, and the CFI was above the accepted cut-off of 0.90 (Hu & Bentler, 1999). Additionally, the factor loadings for the items were

acceptable, with all items loading above 0.40 on the factor (shown in Table 16). Thus, there appears to be support for that these two scales were sufficiently distinct to keep separate in this study. The Cronbach's alpha for the GLI scale was 0.84 and leader effectiveness was 0.87.

Leader Recommendations. To evaluate how participants evaluate the leader they read about on their resume they were asked three recommendation questions, see Appendix D. On a 7 point Likert scale 1 = *very unlikely* to 7 = v*ery likely*, participants were asked how likely they would be to recommend the leader for a promotion if there was an available position open. They were also asked If they were a peer of the leader how much would they enjoy working with them. Participants rated the leader on a 5 point Likert scale, 1 = w*ould not enjoy working with* to 5 = *very much enjoy working with.* Finally, participants were asked to evaluate the leader if they were their subordinate (reporting directly to the leader). Participants rated the leader on a 5 point Likert scale, 1 = *would not enjoy working for* to 5 = *very much enjoy working for.*

Demographics. Participants completed demographic information such as age, race, gender, socio-economic status and the participant's previous work and leadership experience.

Results

Preliminary Analysis

Table 17 provides the means, standard deviations and bivariate correlations of the primary variables in this study. There were several expected significant correlations among the variables. As can be seen from this table, the three prototypicality composites were highly correlated, *p's < .01.* Additionally, the traditional leadership measures were

highly correlated and in the expected direction, *p's < .01*. Importantly, the three prototypicality composites were highly correlated with the traditional leadership measures ($p < .05$). These relationships provided initial evidence that there would be underlying support for further data analysis.

Prototypicality of Different Ethnic/Gender Leaders

To understand the role of the participants' race and gender on the Leader CABs variable, a between subjects ANOVA was conducted in which the participant race and gender were incorporated into the experimental design. Specifically, a 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on the Leader CABs dependent variable was conducted (see Table 18). As can be seen in this table, there was a significant main effect of the gender of the participant, $F(1, 237) = 6.21$, $p < .01$, $\eta_p^2 = .029$, with female participants providing higher overall leadership ratings ($M_{P.Female} = 4.29$, SE = .106) than the male participants ($M_{P.Male} = 3.92$, SE = .101).

There was a statistically significant two way interaction between Leader Gender and Participant Gender, $F(1, 237) = 4.92$, $p < .05$, $\eta_p^2 = .023$. Specifically, female participants rated female leaders higher on Leader CABs ($M_{P.Female.FemaleLeader} = 4.41$, SE = .160) than they did for male leaders ($M_{P.Female.MaleLeader} = 3.90$, SE = .160). Interestingly, male participants also rated female leaders higher in Leader CABs ($M_{P.Male.FemaleLeader} = 4.18$, SE = .139) than they did for male leaders ($M_{P.Male.MaleLeader} = 3.95$, SE = .113). This interaction is shown in Figure 3. As can be seen in this figure, this interaction arose from the female participants making greater distinction between male and female leaders than did the male participants.

Finally, there was also a significant 3 way interaction between the Leader Race, Participant Gender, and Participant, $F(3, 237) = 3.94$, $p < .01$, $\eta_p^2 = .054$ on Leader CABs. This interaction is shown in Figure 4. As can be seen from this figure, Hispanic female and Black female participants rated Hispanic leaders higher than the other participants did, while Black males participants rated Hispanic leaders the lowest on Leader CABs. White female participants rated White Leaders higher on Leader CABs than did any other ethnic/gender participants. Finally, Black females rated Black Leaders the highest compared to all other participants on Leader CABs. These interaction suggest that ethnically minority participants preferred minority leaders whereas ethnically majority participants (i.e., white females) preferred white leaders. Thus, there is seems to be support for the idea that the participants own race and gender influences their perception of the leader's CABs. In summary, these results do not support Hypothesis 2. Specifically, this hypothesis predicted that White males would be rated as most similar to the ideal leader. Instead, female leaders were given the highest ratings and there was a general preference for one's own race (or the minority) leader over the White male leader.

To understand the role of the participant's race and gender on the Relational CABs variable, a between subjects ANOVA incorporating participant race and gender was conducted. Specifically, a 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on the Relational CABs variable was conducted, see Table 19. There was a significant main effect on the gender of the participant, $F(1, 237) = 6.94$, $p < .01$, $\eta_p^2 = .032$, with female participant providing higher Relational

CABs ratings ($M_{P.Female}$ = 4.05, SE = .108) than did male participants ($M_{P.Male}$= 3.67, SE = .103).

There was also a significant 3 way interaction between Leader Race, Participant Race, and Participant Gender, $F(3, 237) = 4.17$, $p < .01$, $\eta_p^2 = .057$, see Figure 5. As can be seen for from this figure, this interaction appears to be due to the differential rating of Hispanic leaders. In particular, Black male participants rated Hispanic leaders the lowest on relationship CABs but other participants (i.e., Black females and Hispanic females) rated Hispanic leaders the highest on Relational CABs. The ratings of Hispanic male[6] participants and White male/female participants were the same. White female participants rated White Leaders significantly higher on Relationship CABs than did the other participants. Finally, Black females rated Black leaders the highest in Relational CABs, compared to other participants. These results, once again, suggest that participants have a preference for leaders of their own race, with minorities providing higher ratings for other minority leaders overall.

To understand the role of the participant's race and gender on the Power CABs variable, a between subjects ANOVA with participant race and gender incorporated was conducted. Specifically, a 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on the Power Cabs variable was conducted, see Table 20. There was a significant main effect on the gender of the participant, $F(1, 237) = 3.03$, $p < .05$, $\eta_p^2 = .018$, with female participants providing higher Power CABs ratings ($M_{P.Female}$ = 3.95, SE = .122) than male participants ($M_{P.Male}$= 3.56, SE = .116). There was also a significant 3 way interaction on the race of the leader with the participants race and

gender, $F(3, 237) = 3.03$, $p < .05$, $\eta_p^2 = .042$, see Figure 6. As can be seen from this figure, minority participants perceived minority leaders as more powerful than did nonminority participants. Specifically, Hispanic female participants rated the Hispanic leader high in power whereas Black female participants rated the Black leaders as the most powerful. Finally, the White female participants rated the White leader as the most powerful. This pattern was not repeated for male participants. Hispanic male participants rated the White Leader as the lowest in power whereas the Black male participants rated the Hispanci leaders as the lowest in power. In summary, this finding shows that the Minority female participants tended to perceive leaders of their own racial groups as having the most power. The male participants did not repeat this pattern.

Perceptions of Leader Ethicality

Exploratory Hypothesis 1 questioned if White males would be considered the most ethical leader compared to other racial/female leaders. To test this hypothesis, a between subjects ANOVA was conducted with participant race and gender incorporated. Specifically, a 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on the perceptions of ethical leadership (Brown et al., 2005 measures) was conducted, see Table 21. There was a significant main effect of participant gender, $F(1, 237) = 3.61$, $p = .05$, $\eta_p^2 = .017$, with female participant providing higher ethical leadership ratings ($M_{P.Female} = 5.65$, SE = .136) compared to male participants ($M_{P.Male} = 5.35$, SE = .130).

Since ethical leadership is the main construct of interest for this dissertation, I will detail the trend level interactions to provide a nuanced understanding of how participants

evaluate leader's ethicality. There was a trend level significant two way interaction between leader race and participant gender, $F(2, 237) = 2.34$, $p = .09$, $\eta_p^2 = .022$, see Figure 7. As can be seen from this figure, female participant provided the highest ratings for Hispanic leaders ($M_{HispanicLeader.FemaleP} = 5.93$, SE = .205), followed by Black leaders ($M_{BlackLeader.FemaleP} = 5.81$, SE = .237), then White leaders ($M_{WhiteLeader.FemaleP} = 5.20$, SE = .263). Male participants rated Black leaders as the highest in ethical leadership *(*$M_{BlackLeader.MaleP} = 5.67$, SE = .180, followed by White Leaders, ($M_{WhiteLeader.MaleP} = 5.31$, SE = .233) then Hispanic Leaders ($M_{HispanicLeader.MaleP} = 5.09$, SE = .244). Since both male and female participants view Black leaders as ethical, Exploratory Hypothesis 1 is not supported. White leaders are not considered more ethical than minority leaders.

There was also a significant 3 way interaction on the race of the leader with the participants race and gender, $F(3, 237) = 3.31$, $p < .05$, $\eta_p^2 = .046$, see Figure 8. Based on this figure, female participants rate their own race leader as higher in ethical leadership compared to the leaders of other races. Black female participants evaluated Hispanic leaders as the second highest in ethicality (compared to Black leaders) and White leaders as the lowed in ethicality. Interestingly, Black and White males evaluate Black leaders as higher in ethicality than leaders of other racial groups. These results directly contradict Exploratory Hypothesis 1 in which I predicted that White male leaders would be perceived to be the most ethical.

Leadership Measures

Hypothesis 4 predicted that White male leaders would be evaluated higher in ethicality, effectiveness, and GLI ratings than the other ethnic-gender leader combinations.

Leader Effectiveness. To test Hypothesis 4 on leader effectiveness, a between subjects ANOVA was conducted with participant race and gender incorporated. A 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on the perceptions of leader effectiveness, see Table 22. There was a significant main effect on the gender of the participant, $F(1, 237) = 8.96$, $p < .01$, $\eta_p^2 = .042$, with female participant providing higher effectiveness ratings ($M_{P.Female} = 4.52$, SE = .097) compared to male participants ($M_{P.Male} = 4.16$, SE = .096). Additionally, there was a significant two way interaction between the race of the leader and the gender of the participant, $F(1, 237) = 2.62$, $p < .05$, $\eta_p^2 = .048$,see Figure 9. As can be seen from the figure, Hispanic leaders seem to have the greatest variability in effectiveness ratings. Female participants rated Hispanic leaders as the most effective whereas male participants rated them the least effective.

There was also a significant two way interaction between the gender of the leader and the gender of the participant, $F(1, 237) = 7.64$, $p < .01$, $\eta_p^2 = .036$. Female participants rated female leaders as higher in effectiveness ($M_{FemaleLeader,FemaleP} = 4.64$, SE = .146), compared to male participants ($M_{FemaleLeader,MaleP} = 4.10$, SE = .147), see Figure 10. Female participants also rated male leaders as more effective ($M_{MaleLeader,FemaleP} = 4.40$, SE = .127), than male participants ($M_{MaleLeader.MaleP} = 4.23$, SE = .104). The interaction is a result of female participants rating female leaders higher in effectiveness whereas Male participants rated male participants higher in effectiveness. Thus, Hypothesis 4 was not supported. Contrary to expectations, White males were not rated the highest in effectiveness

There was also a significant three way interaction between the race and gender of the leader and the race of the participant, $F(4, 237) = 3.27$, $p < .01$, $\eta_p^2 = .059$, see Figure 11. As can be seen from this figure, Black participants had the most divergent effectiveness ratings. Black participants rated Black male leaders as the most effective and they rated White male leaders as the least effective. White participants rated all leaders similarly in terms of effectiveness. Hispanic participants evaluated White males as the highest in effectiveness and Black Females as the lowest in effectiveness. Once again, these results do not support Hypothesis 4.

There was also a significant three way interaction between the race of the leader and the race and gender of the participant, $F(3, 237) = 4.69$, $p < .01$, $\eta_p^2 = .065$, see Figure 12. As can be seen in this figure, the Black participants seem to have rating the leaders quite differently. The ratings of Black participants were the most drastic with Black Male participants rate the Hispanic leaders the lowest in effectiveness, followed by White leaders and Black leaders. Black female participants rated the Black leader the most effective, followed by Hispanic leaders, and then White leaders. The White and Hispanic participate rate the leaders somewhat similarly in terms of effectiveness.

There was also a significant three way interaction between gender of the leader and the race and gender of the participant, $F(1, 237) = 4.61$, $p < .01$, $\eta_p^2 = .022$, see Figure 13. As can be seen in this figure, Black male participants rated female leaders as the lowest in effectiveness compared to the other participants. Further, Black male participants had the lowest effectiveness ratings compared to all other participants. Black female participants rate female leaders as the most effective. The effectiveness ratings of the other participants were very similar.

GLI. To test Hypothesis 4, a between subjects ANOVA was conducted with participant race and gender incorporated on GLI perceptions (General Leadership Impressions: Cronshaw & Lord, 1987; Lord, 1977). To test this, a 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on GLI was conducted, see Table 23. There was a significant main effect on the gender of the participant, $F(1, 237) = 4.86$, $p < .05$, $\eta_p^2 = .025$, with female participant having higher GLI ratings ($M_{P.Female} = 4.91$, SE = .092) compared to male participants ($M_{P.Male} = 3.93$, SE = .096). There were no other main effects or significant interactions on this measure. Thus, Hypothesis 4 was not supported.

Controlling for Leader Prototypicality or Perceived Leader Impressions. Hypothesis 5 predicted that once the leader prototypicality or effectiveness was controlled for, there would not be any differences between the White male leaders and the other ethnic/gender leaders. There were differences found from the previous analyzes however White male leaders were not regarded as the prototype that the other ethnic/gender leaders were compared against. Additional analyzes were done to specifically investigate evaluations of leaders using the Leader CABs variable (the variable that was created from Study 1) as a covariate in the ANOVA. These results provide somewhat conflicting support for Hypothesis 5. All previous significant main effects and interactions were eliminated by adding the Leader CABs variable to the 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVAs across most variables, see Tables 27, 28, 29, 30, 31, 32, 33. The only

variable that continued to have statistical significance once the Leader CABs was controlled was the ethical leadership variable. Even after controlling for Leader CABs, there was a significant three way interaction between gender of the leader and the race and gender of the participant $F(4.10, p < .05, \eta_p^2 = .039)$, see Figure 14. This interaction was previously non-significant. This results shows that once Leader CABs are controlled for, Black female participants still evaluated Female leaders as the least ethical compared to all other participants. Given that 6 out of the 7 dependent variables were no longer significant once Leader CAB was controlled for Hypothesis 5 can be considered supported.

Utilizing a more empirically valid measure of general leader impressions, the GLI measure, as a covariate, once again confirms that Hypothesis 5 is supported. Additional analysis with GLI as a covariate demonstrates the same non-significant results as when this measure is not controlled for, see Tables 34 and 35. White male leaders (and White leaders all together) are not evaluated as highly as Black leaders and Hispanic leaders on effectiveness. Thus, Hypothesis 5 is supported.

Additional Measures. To test Hypothesis 6, participants were asked to rate whether they would recommend the leader for a promotion. Specifically, Hypothesis 6 predicted that after controlling for ethicality, Female leaders would be less desirable as an immediate supervisor compared to White males. To test this hypothesis, I examined whether participants would recommend the leader for promotion, would enjoy working with the leader as a subordinate, and enjoy working with the leader as a peer. To test Hypothesis 6 on recommending the leader for a promotion, a between subjects ANOVA was conducted with participant race and gender incorporated. A 3 (Leader Race: Black,

White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on recommendation for promotion, see Table 24. There was a significant main effect on the ethnicity of the participant, $F(2, 237) = 3.34$, $p < .05$, $\eta_p^2 = .031$, with Hispanic participant providing higher promotion recommendations ($M_{P.Hispanic} = 6.21$, SE = .448) than either White participants ($M_{P.White} = 5.99$, SE = .094) or Black participants ($M_{P.Black} = 5.39$, SE = .281). There were no other main effects of significant interactions. Based on these results it is unknown if Hypothesis 6 is supported or rejected.

In terms of whether participants would enjoy working as a subordinate to the leader, a between subjects ANOVA was conducted with participant race and gender incorporated. A 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on working as a subordinate of the leader, see Table 25. There was a significant main effect on the race of the leader, $F(2, 237) = 4.24$, $p < .01$, $\eta_p^2 = .039$, with Black leaders indicating that they would enjoy working as a subordinate for the leader ($M_{BlackLeader} = 4.16$, SE = .175) more than White leaders ($M_{WhiteLeader} = 3.62$, SE = .194) and both of these leaders more than Hispanic leaders ($M_{HispanicLeader} = 3.55$, SE = .171). There was a significant main effect on the gender of the participants, $F(1, 237) = 7.77$, $p < .01$, $\eta_p^2 = .036$, with female participants indicated that they would enjoy working as a subordinate for the leader ($M_{P.Female} = 3.99$, SE = .148) more than male participants ($M_{P.Male} = 3.47$, SE = .142). There was also a significant three way interaction between the race of the leader and the race and gender of the participant on enjoy working with as a subordinate, $F(3, 237) = 2.57$, $p = .05$, $\eta_p^2 = .036$, see Figure 15. As can be seen from this

figure, all participants indicated that they would enjoy working as a subordinate for Black leaders regardless of participant race and gender. Hispanic leaders, rated as the least likely to enjoy working with as a subordinate compared to the other participants in my study. White female participants rated White leaders the highest, followed by Hispanic males; the other participants rated White leaders similarly. Since these results do not specify reactions to the gender of the leaders it is still unknown if Hypothesis 6 is supported or unsupported. While not significant, the direction of the mean on this variable seems to indicate that Female leaders would be preferred to male leaders as a subordinate ($M_{Female\ Leader}$= 3.80, $M_{MaleLeader}$= 3.74). This provides initial evidence that Hypothesis 6 is not supported.

Finally, participants were asked if they would enjoy working with the leader as a peer. Therefore, a between subjects ANOVA was conducted with participant race and gender incorporated. Specifically, a 3 (Leader Race: Black, White, Hispanic) X 2 (Leader Gender: Male, Female) X 3 (Participant Ethnicity: Black, White, Hispanic) X 2 (Gender of Participant: Male, Female) ANOVA on enjoy working as a peer of the leader, see Table 26. While there was no significant main effects or two way interaction on this variable, there was a significant three way interaction between the race of the leader and the race and gender of the participant on enjoy working with the leader as a peer, $F(3, 237) = 2.78$, $p < .05$, $\eta_p^2 = .039$, see Figure 16. Black leaders were rated highly by all participants with Hispanic leaders provided the most conflicting ratings on this dependent variable. Finally, Black male participants indicated that they would least prefer working with Hispanic leaders as a peer. White female participants rated White leaders the highest, followed by Hispanic males; the other participants rated White leaders similarly.

Since these results do not specify reactions to the gender of the leaders there is still ambiguity on if Hypothesis 6 is supported or unsupported.

Controlling for Ethicality. Hypothesis 6 predicted that once ethicality was controlled for, female leaders would not be preferred as an immediate supervisor. Additional analysis reveal that there were no significant main effect on Gender of the Leader, see Table 36, 37, 38, 39, and 40. There were significant interactions on with this covariate on perceptions of the leaders effectives (see Figures, 17, 18, 19, 20, and 21). Therefore, Hypothesis 6 is not supported.

Discussion

Study 2 demonstrated that raters have a strong in-group or matching preferences over a normative preference for White Male leaders. It was believed that since is a strong norm for White male leaders (Hogg, van Knippenberg, & Rast, 2012) that they would be rated higher on the various leadership measures. Study 2 attempted to test this by exposing participants to a generic resume and having them rate the leaders on important variables. It was believed that participants would reveal a strong White male bias due to the societal norm of White males as the traditional leaders in power. Instead this study demonstrated an overall matching preference between the participant's race and gender and the leader's race and gender. Specifically, participants evaluated the leader by their own racial background on important leadership variables (ethicality, leader impressions, and effectiveness). Consistently, minority female participants provide higher ratings for minority leaders over White leaders, while White female participants provide higher ratings for White leaders. Additionally, Black female participants are strong supporters of Black leaders across the various measures. These participants feel a strong sense of

loyalty for their own in-group leaders and consistently rate them the highest ethicality and effectiveness. Interestingly, these participants also evaluate White leaders the lowest on these outcomes compared to the minority leaders. This could be due to a sense that minority leaders require support that White leaders do not. This pattern was consistent across most of the measures in this study, contrary to the predicted expectation of White Male leaders vs ethnic/gender leaders.

In regards to ethical leadership, female participants evaluate leaders in their own racial group as higher in ethical leadership compared to the other leaders. This could be an indication of social identity theory at play; female participants demonstrate stronger in-group preferences than males on this important variable (Hogg, van Knippenberg, & Rast, 2012). Interestingly, across all of the male participants, they evaluate the Black leaders as the highest in ethical leadership. One reason for this may be due to the presence of President Obama. It is possible that the saliency of a Black Leader who is male (Obama) underlies how male evaluate the leaders in this study. Another potential reason for these results could be due to a feeling of social desirability, the male participants in the Black leader condition demonstrate a positive bias towards these leaders, due to a fear of being considered racist or because they feel that they should value Black males highly. Additionally, the higher ratings of minority leaders to White leaders could potentially be a manifestation of the current levels of frustration with congress (Rassmusan Report, 2014). Congress is typically perceived of as being dominated by White males (Grose, 2011) and in the last few months have been viewed very negatively for their infighting and lack of progress on important policies (Gallup, 2014). Overall, these results seem to indicate a relatively new trend in the leadership

literature which prioritizes or evaluate Black leaders over the traditional leader (White male leaders).

White participants displayed the most consistent evaluations and ratings of leader across measures. In general, White females rate White leaders higher than the other leaders but also demonstrate overall high evaluations of minority leaders. In comparison, White male participants rated similarly across races and genders on the different variables. Interestingly, Black male and female ratings of leader effectiveness seem to be the most deviating on these variables. Black female participants consistently rate female and Black leaders the highest, while Black male participants rate Male leaders the highest and Hispanic leaders the lowest on the different leadership measures.

Indeed, the most interesting results of Study 2 revolve around the Hispanic leaders and participants. In general, male participants rate Hispanic leaders poorly, while female participants rate them very highly. In part, these results might be driven by Hispanic female participants ratings of Hispanic leaders (always the highest) but Black females participants and White female participants also rated these leaders the highest on a variety of outcomes (ethicality, GLI and effectiveness). In contrast, the Hispanic male participants consistently rated Hispanic leaders lower compared to White leaders. It is unfortunate that there was no data for the Hispanic male in the Black leader condition to see their evaluations. The question is would they give them as poor ratings as they give Hispanic leaders (continuing their general preference for White leaders) or rate them as highly as Hispanic female participants did. An additional study is needed that really investigates Hispanic participant's reaction to leaders in terms of ethicality and effectiveness.

Study 2 results provide an interesting lens for viewing minorities and females as communal and religious. Specifically, Hypothesis 1b suggested that traits relating to communality or interdependence (Relational CABs) would be rated higher for minority and female leaders compared to White male leaders. This study confirmed that this was the case. Moreover, Hypothesis 1c was similar in regards to religiosity and minority/female leaders compared to White male leaders, which was confirmed in this study. This demonstrates that there is consistency in our minority and female prototype that extends to leaders on traits relating to interdependence and religion.

Finally, this study validated the Study 1 CABS that participants generated and were found to be consistent for the leader category. This study demonstrated the evaluating leaders through the lens of specific characteristics, attributes and behaviors to explain differential reactions between participants and leaders of different racial/gendered background. An important consideration is the role of implicit evaluations of leader rather than explicit measures. It is possible that the results of this study are due to the general fear of how participants would be evaluated, thus participants withheld their implicit reactions or preferences to the various leaders. The following study aimed to investigate participant's implicit ethical judgments of the different ethnic/female leaders.

Study 3

Purpose

The purpose of Study 3 was to test whether ethicality perceptions are an implicit function of leadership categorization. Since explicit measurement may not accurately assess how evaluators process information about leaders with different ethnic backgrounds, an implicit test was utilized to capture the activation and encoding process of the leadership prototype. This study utilized a similar procedure as Scott and Brown's

(2006) gender and leadership reaction time study. Scott and Brown argued that reaction time measures were necessary to measure the influence of the automatic recognition based leadership perceptions. The implicit methodology is better suited to determining the role of the automatic trait encoding processes (Gilbert, Swencionis, & Amodio, 2012). Therefore, I predicted that prototypical leaders (White Males) are implicitly perceived as more ethical than leaders who have a different ethnic background or are female. Additionally, this study measured participant's own ethnicity and gender and examined how this affected their ratings of leaders who are similar or different to their own ethnic backgrounds and gender (see Figure 3). Overall, this study added to the dissertation by examining the unconscious process that occurs when evaluating ethical leaders and examined how participants own demographic composition influences their evaluations.

> *Hypothesis 7: The speed with which participants respond to White male leader targets on the IAT will be faster compared to the speed with which participants respond to ethnic leaders when evaluating the leader ethicality.*
>
> *Exploratory Hypothesis 2: The speed with which participants respond to female leaders will be faster compared to the speed with which participants respond to male leaders when evaluating the leader's ethicality.*
>
> *Exploratory Hypothesis 3: Participants ratings of leader ethicality will establish a rank order of leader ethicality based on ethnicity and gender for example White female leaders will be rated as more ethical than Black female leaders, followed by Hispanic female leaders, Hispanic male leaders, ending with Black male leaders.*

Participants

A total of 488 participants were recruited through Amazon's Mechanical Turk®. There were 289 participants that self-identified as White/European American or

Caucasian (74.9%), 24 were Black/African American (6.2%), 23 identified as Bi/Multi-racial (4.9%), 21 were Hispanic/Latino (%), 20 were Asian (4.1%), and the others were Native American and Arab (6 total for 1.2%). Once again for analysis purposes, only the White, Black and Hispanic participants were tested to understand they perceived of leaders of their own race/gender. In terms of gender, 186 were female (48.2%), 188 were male (48.7%), with 282 non responsive. For educational attainment, 148 indicated that they had received a minimum of a high school diploma (21%), 65 had an Associate's degree (9.2%), 150 had a Bachelor's degree (21.2%), and 55 had a Graduate degree (8.4%). In terms of age, 17 participants were under age 20 (2.4%), 166 were age 20-29 (23.5%), 131 were age 30-39 (18.6%), 34 were age 40-49 (4.8%), 49 were age 50-59 (6.9%) and 20 were age over 60 (2.8%). Participants were paid on average $.60 and took approximately 25 minutes to complete the task.

Procedures

This study employed a 2 (leader gender: male, female) X 3 (leader race: Black, Hispanic, White) between-subjects experimental design. Participants were first prompted to think of a 6 digit unique code that would be necessary to link their materials together. They were told that this could be any 6 digits and that they should write it down to ensure they consistently use the same code throughout the study. They were then asked to repeat the code again. Participants were then instructed to click a link that would take them to a word association task (i.e., Inquisit[7] -- the IAT software), which would involve aligning various descriptors to different types of leaders. Participants then completed the IAT and were rerouted back to the online Qualtrics survey. They were prompted once again enter their unique code[8]; they then completed intolerance measures, demographics and were

then debriefed. Intolerance measures were included in this study to understand how individual differences in bias reactions may have interacted with the implicit measures.

Materials

Implicit Attitude Test (IAT). The IAT measures the relative strength of association between two target concepts with either a positive or negative valence. Due to the structure of traditional IAT and Multifactor IATs (Greenwald, McGhee & Schwartz, 1998; Sriram & Greenwald, 2009), I needed to create three separate IATs. Traditionally, the multifactor IAT compares participant's relative preferences for 4 different categories, however this study needed to compare relative preferences for 6 different categories. Specifically, the 3 multifactor IATs were constructed to test participants' differential evaluation of the ethicality of leaders which differed both in terms of race (i.e., Black, Hispanic, White) and gender (i.e., Male, Female).

Participants were randomly assigned to one of three multifactor IAT conditions: *Condition WB*: White, Black, Male, Female leaders, *Condition BH*: Black, Hispanic, Male, Female Leaders, or *Condition WH*: White, Hispanic, Male, Female Leaders. The 3 IATs were identical except for the pictures presented to participants. In each IAT condition, participants responded to 16 sets of pictures. For example, in the WB condition, participants responded to 4 Black Males, 4 Black Females, 4 White Males and 4 White Females pictures (see Appendix E to see the screen shot and example pictures). As previously detailed in the Stimuli Pilot Study and Study 2, each picture was chosen because it was a gray-tone picture representing a person in business attire, wearing a consistent expression (smiling), and the picture was truncated at the shoulder with no background that would unintentionally bias participants.

The three multifactor IAT measures created for this study were based on the Sriram and Greenwald (2009) empirically validated paradigm. The IAT is presented to participants as a dual classification task: pictures of leaders from different races and ethical and unethical words (i.e., Moral, Respectable, Proper, Virtuous, Dishonest, Immoral, Unjust and Corrupt). The initial 40 classifications made by participants were practice trials. The first 20 trials had participants practice classifying unethical/bad words to the "S" key and ethical/good words to the "L" key. The second block of 20 classifications had participants categorize leader pictures into "S" and "L" categories depending upon the race of the leader. Information was provided at the top of the screen to remind participants which button to press for a particular category (e.g., Hispanic Male Leader press "L" key).

After the initial 40 practice classifications, participants moved into the test phase. This test phase consisted of 60 simultaneous classifications for both ethical/unethical words and leader pictures. For example in the WB IAT condition, participants were instructed to press the "L" key if an ethical word or if a picture of a "White" leader appeared. They were instructed to press the "S" key if an unethical word or a picture of a "Black" leader appeared. Participants were told to go as fast as they could while minimizing mistakes. When they made a mistake, a red "X" would appear and this "X" could only be removed by pressing the correct key. Participants were told that going too slow or making too many mistakes would disqualify their scores.

Participants performed this simultaneous categorization task for 60 trials. The pairing of the leader pictures with ethical/unethical words was counterbalanced so that on half of these trials, participants pressed the "L" key if an ethical word or if a picture of a

"Black" leader appeared. They pressed the "S" key if an unethical word or a picture of a "White" leader appeared. The more strongly associated ethicality is with a particular kind of leader, the faster the participants' reaction times were expected to be for that leader (Bassili, 2003; Jung & Lee, 2009).

Measures

IAT D-Scores. Participant's preferences or attitudes to specific targets or categories were calculated using D-Scores within the IAT (Greenwald, Nosek, & Banaji, 2003). Specifically, this is an individual standardized response time measure in which the individual participant's average response rate to a test block is divided by that individual's standard deviation of all response rates across two test blocks. This measure has been shown to be psychometrically sound compared to other scoring strategies suggested for the IAT (Greenwald et al., 2003; Sriram, Nosek, & Greenwald, 2007). This D can be thought of as a type of effect size that is similar to Cohen's d (1977), but D is an effect size for each individual's reaction to the experimental stimuli and not a global effect size, such as Cohen's d, in which the reactions of all individuals in the experiment are combined to create a single effect size. The IAT D-Score can be either positive or negative and can go from +2 to -2. Typically, these scores range from 1 to -1 however, some participant's reaction times are longer than others (Greenwald et al., 2003). A positive D indicates a stronger association between target A and ethicality, whereas a negative D indicates a stronger association between target B and ethicality. Previous research has demonstrated that a faster or higher response time is indicative of a strong association between the target and the attribute (Green & Swets, 1966; Knowles et al., 2010; Nosek & Banaji, 2001).

For example, in the BH IAT (Black/Hispanic) condition, target A was Black males, B was Black females, C was Hispanic males, and D was Hispanic females. Across all three IAT conditions, Attribute A was always associated with ethical words and Attribute B was always associated with unethical words. A positive D-Score comparing targets A and B is interpreted as Black males being perceived as more ethical than Black females. A negative D-Score for these two targets would be interpreted as Black females being perceived as more ethical than Black males. A D-Score of 0 indicates no preference. In the WB IAT condition had the same layout but for White and Black leaders (A= WM, B=WF, C=BM, D= BF). Finally, for the WH IAT condition, the set up was as follows: A= WM, B=WF, C=HM, D= HF.

Across all three IATs, a comparison of AB and CD was a within participant evaluation of gender since race was held constant. A comparison of AC and BD was a within participant evaluation of race since gender was held constant. The AD and BC D-Scores provide an estimate of ethical preference across race and gender. The Inquisit software automatically provides the D-Score estimates for each participant across all blocks and trials. The software also corrects for potential latency error by incorporating an error penalty (Greenwald et al., 2003) to account for any bias or learning that takes place during the IAT, specifically for the training trials and the first block after it switches between targets and attributes.

Intolerance Schemas. To measure how intolerant participants might be towards minorities or females on the implicit measures, the Intolerance Schema Measure by Aosved, Long and Voller, (2009) was utilized. This 54 item measure contains 7 subscales which measured whether a participant was high on sexism, racism, sexual orientation

prejudice, ageism, classism, and religious intolerance. This scale had a 5 point Likert scale, 1 = *strongly disagree* and 5 = *strongly agree*. A confirmatory maximum likelihood factor analysis was conducted on these scales using Mplus version 5.21 (Muthen & Muthen, 2007). The seven-factor model fit the data poorly; all indices were outside of the accepted cutoffs. Therefore, only the subscales relating to issues of race and gender were analyzed in this study. Specifically, sexism, racism, classism, and religious intolerance were included in further analysis.

For the sexism sub-dimension, the one-factor model fit the data acceptably well (χ^2 (26) = 61.54, χ^2/df = 2.36, p < 0.05, RMSEA = 0.05 CFI = 0.98). While the χ^2 was significantly different from zero, the CFI was above the accepted cut-off of 0.90, the RMSEA was below the accepted cut-off of 0.08, and the χ^2 /df ratio was below the recommended cutoff of 3 (Hu & Bentler, 1999). Further the factor loadings for all of the items were significant and of acceptable magnitude (i.e., all items loading above 0.40. see Table 41). The Cronbach's alpha for this scale was 0.88.

For the racism sub-dimension, the one-factor model fit the data well ($\chi^2(14)$= 114.89, χ^2/df= 8.2, p < 0.05, RMSEA = 0.12, CFI = 0.93). The χ^2 was significant and the χ^2/df criterion was over 3. Further, the RMSEA was over the acceptable cut-off of .08. Only the CFI index was at acceptable levels. However, the factor loadings for the items were significant with most items loading above 0.40 on the factor (shown in Table 41). I deleted two items due to poor loading (item 1 & 2). The Cronbach's alpha for this scale was 0.88.

For the classism sub-dimension, the one-factor model fit the data acceptably well (χ^2 (27)=132.06, p < 0.05, χ^2 /*df*=4.89, RMSEA = 0.09, CFI = 0.93). While the χ^2 was

significant and the χ^2/df was over 3, the other indices were acceptable (Hu & Bentler, 1999). The factor loadings for the items were significant and all items loaded above 0.40 on the factor (shown in Table 41). Cronbach's alpha for this scale was 0.87.

For the religious intolerance sub-dimension, the one-factor model fit the data acceptably well (χ^2 (14)=40.73, p<0.05, χ^2/df= 2.86, RMSEA = 0.06, CFI = 0.97). While the χ^2 was significant, the other three indices were acceptable (Hu & Bentler, 1999). The factor loadings for the items were acceptable, with most items loading above 0.40 on the factor (shown in Table 41). I deleted two items due to poor loading (item 1 and 2). The Cronbach's alpha for this scale was 0.84.

Demographics. Participants completed demographic information such as age, race, gender, socio-economic status and the participant's previous work and leadership experience.

Results

Preliminary Analysis

Table 42 provides the means, standard deviations and bivariate correlations of the primary variables in this study. When evaluating the direction of the D-scores, a cut off of .02 was utilized to interpret the direction of the relative preferences. It was assumed that anything from -.02 to .02 was demonstrating a lack of preference between the attributes and targets, see Tables 43, 44, and 45. For the Black-Hispanic and White-Hispanic ethicality IATs (Tables 44 and 45), there were no significant correlations between the D-scores and any of the intolerance measures.

For the Black-Hispanic IAT, there were several significant correlations between the D-scores and the intolerance measures, see Table 43. For religious intolerance, there

was a negative correlation (r (282) = -.16, $p < .05$) with the Black female-Hispanic male D-score. Specifically, all participants, on average, preferred the Black female leader over the Hispanic male leader. However, participants who were religious intolerant did not have as strong a preference for Black female leaders over Hispanic male leaders compared to participants who were more religiously tolerant. Further, there was a positive correlation (r (282) = .20, $p < .01$) between religious intolerance with regard to the ethicality of Hispanic male-Hispanic female leader D-score. Specifically, the religiously tolerant participants viewed Hispanic female leaders as more ethical than Hispanic males. However, the more religiously intolerant participants did not differentiate in terms of ethicality between Hispanic male and female leaders.

For classism, there was a positive correlation (r (282) = .20, $p < .01$) with the Hispanic male-female D-score. Specifically, those who expressed higher intolerance for lower income populations (high classism) saw Hispanic males as more ethical than Hispanic females. Low classist participants saw Hispanic female leaders as more ethical than Hispanic male leaders.

For the racism measure, there was a negative correlation (r (282) = -.16, $p < .05$) with the Female Black-Hispanic D-score. Specifically, for the participants low in racism, Black female leaders were rated more ethical than Hispanic female leaders. However, racist participants did not differentiate between Black and Hispanic leaders in terms of ethicality. For the Hispanic Male-female D-scores, there was a positive correlation (r (282) = .18, $p < .05$) with racism. Specifically, non-racists were more likely to view Hispanic Female leaders faster as more ethical than Hispanic male leaders, while racists did not differentiate in ethicality between Hispanic male and Hispanic female leaders..

For the sexism measure, there was a negative correlation (r (285) = -.16, $p < .05$) with the Black female-Hispanic male D-score. While all participants categorized the Black female leader as ethical over the Hispanic male leaders, the non-sexists exhibited a stronger preference for the Black Female leaders than did the sexist participants.

Across the IATs these relationships provide initial evidence that there would be underlying support for the hypotheses with further data analysis.

Testing the Hypotheses

Hypothesis 7 predicted that participants would evaluate White male leaders much faster than other ethnic/gender leaders, indicating that they perceive White male leaders as higher in ethics compared to the other leaders. To test this, a one way Analysis of Variance between subjects of the IAT condition on the D-scores was conducted, see Table 46, 47, 48, 49, 50 and 51. There was no statistically significant ethical evaluations for gender across the IAT conditions, $F(2, 489) = 1.3$, $p = .26$, $\eta_p^2 = .000$, with no difference across the means for all conditions ($M_{BlackHispanicIAT} = -.096$, SE = .023, $M_{WhiteBlackIAT} = -.105$, SE = .026, and $M_{WhiteHispanicIAT} = -.152$, SE = .028). There was a significant main effect of ethical evaluations on race across the IAT conditions, $F(2, 489) = 4.45$, $p <= .01$, $\eta_p^2 = .000$. Based on the positive direction of the means, participants in the WH IAT condition, which evaluated White Leaders as high in ethicality, ($M_{WhiteHispanicIAT} = .130$, SE = .028) compared to Hispanics leaders. Participants also evaluated White leaders higher in WB IAT condition ($M_{WhiteBlackIAT} = .096$, SE = .026), while Black leaders were rated higher in ethicality for BH IAT ($M_{BlackHispanicIAT} = .028$, SE = .023). There were no significant difference on ethical evaluations when comparing across races and genders across all of the IAT conditions, $F(2, 489) = 1.59$, $p = .20$, η_p^2

=.000, with no statistical significant difference across the means for all conditions ($M_{BlackHispanicIAT}$ = .064, SE = .022, $M_{WhiteBlackIAT}$ = .110, SE = .025, and $M_{WhiteHispanicIAT}$ = .119, SE = .026). Given that participants rated White leaders higher in ethicality, this provides initial indication that Hypothesis 7 was supported.

Same Race Different Gender Leader D-Scores. To test whether participants own gender and race impacted their ethicality preferences, a 3 (IAT condition: Black/Hispanic, White/Black, White/Hispanic) X 2 (gender of participant: male, female) X 3 (Ethnicity of participant: White, Black, Hispanic) between subjects ANOVA on the AB D-score, see Table 46. This D-score represented the relative ethicality preferences participants might have when comparing leaders of the same race but with different genders. For the AB D-score, there was no significant main effect or interaction across the conditions and participants.

An additional test of same race of the leader with different genders the CD D-score was analyzed. To test whether participants own gender and race impacted their ethicality preferences, a 3 (IAT condition: Black/Hispanic, White/Black, White/Hispanic) X 2 (gender of participant: male, female) X 3 (Ethnicity of participant: White, Black, Hispanic) between subjects Analysis of Variance on the CD D-score, See Table 51. For the CD Dscore, there was no significant main effect or interaction across the conditions and participants. These results indicate that participants evaluate leaders within the same race but across different genders similarly.

Same Gender Different Race Leader D-Scores. To test whether participants own gender and race affected their ethicality preferences, a 3 (IAT condition: Black/Hispanic, White/Black, White/Hispanic) X 2 (gender of participant: male, female) X 3 (Ethnicity of

participant: White, Black, Hispanic) between subjects Analysis of Variance on the AC D-score, see Table 47. This D-score represented the relative ethical preferences participants might have when comparing leaders of the same genders (Males) but with different races. For the AC D-score, there was a significant main effect across the IAT conditions, $F(1, 242) = 4.05$, $p < .01$, $\eta_p^2 = .025$. Based on the direction of the means, the WB IAT had negative D scores ($M_{WhiteBlackIAT} = -.22$, SE = .126), followed by the BH IAT ($M_{BlackHispanic} = .02$, SE = .105), and finally the WH IAT had positive D-scores ($M_{WhiteHispanic} = .23$, SE = .105). This indicates that participants in the WB condition were more likely to evaluate Black leaders as higher in ethicality. There was very little difference in ethicality for Black or Hispanic leaders for participants in the BH condition, while in the WH condition were more likely to evaluate White leaders as higher in ethicality.

There was also a significant two way interaction of IAT condition and participant's gender on the AC D-score, $F(1, 242) = 4.19$, $p < .01$, $\eta_p^2 = .020$, see Figure 22. Based on the direction of the means, the males in the BH IAT condition rated Black leaders as higher in ethicality ($M_{BlackHispanic.MaleP} = .16$, SE = .182), while females in the BH IAT condition rated Hispanics as higher in ethicality ($M_{BlackHispanic.FemaleP} = -.10$, SE = .106). For the males in the WB IAT condition, they was no difference in ethicality preference ($M_{WhiteBlack.MaleP} = .02$, SE = .173), while females in the WB IAT rated Blacks as higher in ethicality ($M_{WhiteBlack.FemaleP} = -.46$, SE = .182). For the males in the WH IAT, they were rated White leaders as higher in ethicality ($M_{WhiteHispanic.MaleP} = .10$, SE = .182), while females in the WH IAT also rated Hispanics as higher in ethicality ($M_{WhiteHispanic.FemaleP} = .43$, SE = .164). Overall, these results indicate that female participants have a minority leader ethicality preference while males evaluate White

leaders as higher in ethicality. Therefore, the results for Hypothesis 7 are supported for male participants yet not supported for female participants. Since there was no specific predictions relating to participants own gender and their leader preferences, the interpretation of this hypothesis is ambiguous.

There was also a trend level significant two way interaction of IAT condition with participants ethnicity on the AC D-score, $F(4, 242) = 2.15$, $p = .07$, $\eta_p^2 = .032$, see Figure 23. Based on the direction of the means, there was no substantial difference in ethicality rating for the Blacks and Hispanics in the BH IAT condition ($M_{\text{BlackHispanic.BlackP}} = .02$, SE = .239 and $M_{\text{BlackHispanic.HispanicP}} = -.01$, SE = .239), while the White participants in the BH IAT condition rated Blacks as higher in ethicality ($M_{\text{BlackHispanic.WhiteP}} = .06$, SE = .044). For the WB IAT, the Blacks and Hispanics rated Black Leaders as higher in ethicality compared to Whites ($M_{\text{BlackHispanic.BlackP}} = -.22$, SE = .202 and $M_{\text{BlackHispanic.HispanicP}} = -.56$, SE = .313), while the White participants in the WB IAT rated Whites as higher in ethicality ($M_{\text{BlackHispanic.WhiteP}} = .12$, SE = .055). For the WH IAT, there was a general preference for the White Leader across all of the participant ethnicities ($M_{\text{BlackHispanic.BlackP}} = .30$, SE = .256, $M_{\text{BlackHispanic.HispanicP}} = .30$, SE = .192, $M_{\text{BlackHispanic.WhiteP}} = .12$, SE = .06). These results indicate that when comparing Black to White leaders, minority participants prefer the Black leader. Interestingly, when comparing Hispanic and White leaders, all participants prefer the White leader.

Finally for the AC D-score, there was a significant 3 way interaction between IAT condition, participant's gender and participant's race, $F(4, 242) = 2.65$, $p < .05$, $\eta_p^2 = .034$, see Figure 24. As can be seen by this figure, Minority females prefer the Minority male leader in the BH and WB IAT condition and yet prefer the White Male in the WH

condition. White and Black males prefer the target A (Black males in the BH, White males in the WB and WH IATs). Interestingly, Hispanic male participants prefer the Black male leader in the BH and the WB IAT, yet the Hispanic male leader in the WH IAT. These results offer contradictory support for Hypothesis 7. Black male leaders are preferred when compared to Whites and Hispanics, however when White males are compared to Hispanic male leaders, only Hispanic male participants prefer Hispanic male leaders. Taken together, Hypothesis 7 is not supported due to White male leaders not being supported across all IAT conditions.

An additional test of same gender of the leader (females) with different races the BD D-score was analyzed. To test whether participants own gender and race impacted their ethicality preferences, a 3 (IAT condition: Black/Hispanic, White/Black, White/Hispanic) X 2 (gender of participant: male, female) X 3 (Ethnicity of participant: White, Black, Hispanic) between subjects Analysis of Variance on the BD D-score, see Table 48. For the BD D-score, there was no significant main effect or two way interaction across the conditions and participants. There was a significant 3 way interaction between IAT condition, participant's gender and participant's race, $F(4, 242) = 3.08$, $p < .05$, $\eta_p^2 = .044$, see Figure 25. As can be seen from this figure, In the BH condition, Hispanic females were evaluated as higher in ethics compared to Black leader by most participants. Only Black females evaluated Black female leaders as higher in ethicality compared to Hispanic female leaders. In the WB condition, White and Hispanic females and Black males evaluated the White female as higher in ethicality compared to Black female leaders. Hispanic Male and Black female participants evaluated the Black female leader as higher in ethicality. For the WH IAT[9], White females alone rated the

Hispanic females as higher in ethics, compared to all other participants who evaluated the White female leader as higher in ethicality.

Cross Race and Gender of Leader D-Scores. To test whether participants own gender and race impacted their ethicality preferences, a 3 (IAT condition: Black/Hispanic, White/Black, White/Hispanic) X 2 (gender of participant: male, female) X 3 (Ethnicity of participant: White, Black, Hispanic) between subjects Analysis of Variance on the AD D-score, see Table 49. This D-score represented the relative ethical preferences participants might have when comparing leaders of different genders (Males/Female) and with different races. For the AD D-score, there was a significant main effect across the IAT conditions, $F(1, 242) = 3.18$, $p < .05$, $\eta_p^2 = .015$. Based on the direction of the means, for the WB IAT there were no substantial ethicality preferences between the Black and White Leaders ($M_{WhiteBlackIAT} = -.01$, SE = .142). The BH IAT demonstrated a slight ethicality preference for the Black leaders ($M_{BlackHispanic} = .04$, SE = .119), and finally the WH IAT had negative D-scores ($M_{WhiteHispanic} = -.23$, SE = .108), indicating that participants were more likely to evaluate Hispanic Leaders as higher in ethicality. There was also a significant main effect for gender, $F(1, 242) = 12.08$, $p < .001$, $\eta_p^2 = .014$. Based on the direction of the means, males had a positive D indicating an ethicality preference for the A target ($M_{Gender} = .14$, SE = .104) and the females were more likely to evaluate the D target as higher in ethicality ($M_{Female} = -.28$, SE = .101).

There was also a significant two way interaction of IAT condition with participants own gender and race on the AD D-score, $F(1, 242) = 3.63$, $p < .05$, $\eta_p^2 = .033$, see Figure 26. Based on the direction of the means, the Hispanic and Black male participants rated the A target as higher in ethicality ($M_{P.HispanicMale} = .17$, SE = .221 and

$M_{P.BlackMale}$ = .17, SE = .215), while White males were more likely to the D target as higher in ethicality($M_{P.WhiteMale}$ = .08, SE = .051). This indicates that the minority males preferred the male leaders and the White males preferred the minority female leaders (D targets were always minority females). For the female participants, there was an overall rating for the D target as higher in ethicality ($M_{P.HispanicFemale}$ = -.38, SE = .226, $M_{P.BlackFemale}$ = -.49, SE = .204, and $M_{P.WhiteFemale}$ = -.04, SE = .051). This indicates that the females rate female leaders as higher in ethicality compared to male leaders.

An additional test of the relative ethical preferences that participants might have when comparing leaders of different genders (Female/Male) and with different races was conducted on the BC D-score. A 3 (IAT condition: Black/Hispanic, White/Black, White/Hispanic) X 2 (gender of participant: male, female) X 3 (Ethnicity of participant: White, Black, Hispanic) between subjects Analysis of Variance on the BC D-score, see Table 50. For the BC D-score, there was a significant main effect on participants ethnicity, $F(1, 242) = 3.45$, $p < .05$, $\eta_p^2 = .027$, Based on the direction of the means, White and Black participants rated the B leader as higher in ethicality compared to the C Leader (M_{WhiteP} = .23, SE = .034 and M_{BlackP} = .30, SE = .143), while the Hispanic participants rated the C target as higher in ethicality compared to the B leader ($M_{HispanicP}$ = -.16, SE = .148). This indicates that White and Black participants rated the Female leaders as higher in ethicality, while the Hispanic participant's rated the minority male target (the C target was always a minority leader), as higher in ethicality. Finally, there was also a significant 2 way interaction between IAT condition and participant's ethnicity, $F(1, 242) = 2.58$, $p < .05$, $\eta_p^2 = .038$, see Figure 27. In the BH IAT condition, across all of the participants ethnicities, female leaders were rated higher in ethicality ($M_{BlackHispanic.BlackP}$ = .38, SE =

.253, $M_{\text{BlackHispanic.HispanicP}}$ = .28, SE = .214 and $M_{\text{BlackHispanic.WhiteP}}$ = .16, SE = .047). For the WB IAT, the White and Black participants rated female leaders as higher in ethicality compared to minority male leader ($M_{\text{WhiteBlack.BlackP}}$ = .31, SE = .214 and $M_{\text{WhiteBlack.WhitesP}}$ = .20, SE = .058), while the Hispanic participants in the WB IAT rated the minority males as higher in ethnicity as higher in ethicality ($M_{\text{WhiteBlack.HispanicP}}$ = -.78, SE = .32). For the WH IAT, the White and Black participants rated female leaders as higher in ethicality compared to minority male leader ($M_{\text{WhiteHispanic.WhiteP}}$ = .32, SE = .070 and $M_{\text{WhiteHispanic.BlackP}}$ = .10, SE = .271), while the Hispanic participants in the WH IAT had no rating of ethicality for either leader ($M_{\text{WhiteHispanic.HispanicP}}$ = -.00, SE = .203).

Exploratory Hypotheses. Exploratory Hypothesis 2 examined if there would be a difference in response latencies as a function of the leader characteristics. Specifically, this hypothesis proposed that participants would respond to female leaders faster than male leaders. To test this hypothesis, a generalized randomized block factorial Analysis of Variance on response latency was conducted. The block factor was participant whereas the experimental factor was the gender of the leader. The response time taken to respond to the leader block in the IAT was the dependent variable. The results indicated a significant main effect of leader gender on response latency, $F(2, 275) = 6.09$, $p < .01$. Based on the direction of the means, responses to female leaders were faster than responses to male leaders (M_{FemaleL} = 780.38*ms*, SE = 1994.97*ms*, M_{MaleL} = 814.81*ms*, SE = 1656.66*ms*). These results support Exploratory Hypothesis 1.

Exploratory Hypothesis 3 predicted that there would be a rank ordering of the leaders based on the ethical IAT relative preferences. To test this hypothesis, a generalized randomized block factorial Analysis of Variance on response latency was

conducted. The block factor was participant whereas the experimental factor was the gender of the leader. The response time taken to respond to the leader block in the IAT was the dependent variable. The results indicated a significant main effect of the leader condition on response latency, $F(5, 275) = 3.78$, $p < .01$. Based on the direction of the means, there was a rank ordering of the leaders. Specifically, White Female leaders had the lowest speeds ($M_{WF} = 747.345ms$, SE = 8.59*ms*), followed by Black Female leaders ($M_{BF} = 767.79ms$, SE = 6.50*ms*) compared to the IAT response rate for Black Male (M_{BM} = 804.69*ms*, SE = 19.73*ms*), White Male ($M_{WM} = 804.10ms$, SE = 15.088*ms*), Hispanic Female ($M_{HF} = 827.34ms$, SE = 31.16*ms*) and Hispanic male ($M_{HM} = 836.41$, *ms*, SE = 7.82*ms*), which were not statistically different. These results tell us that White females leaders are responded to the fastest on the ethical IAT, followed by the Black Female leader. The other leaders have similar response rates on the ethical IAT. This provides support for the Exploratory Hypothesis 3.

***Controlling for Bias*.** To understand the role that implicit bias might play in predicted that participants how participant responded to the ethnic/gender leaders in these implicit measures, ANOVA were conducted that used the 4 bias measures (religious intolerance, classism, racism, and sexism) as covariates, see Tables 52-57. When controlling for the bias measures, there was a significant main effect on the BD D-scores, $F(2, 282) = 2.56$, $p = .07$, $\eta_p^2 = .018$, see Table 56. This score represents the different race and same gender scores (BH IAT= Black female and Hispanic female, WB IAT = White female with Black females and WH IAT =White Female with Hispanic females). The direction of the means indicates that for those in the BH condition, the Hispanic female leader is preferred ($M_{BH.IAT} = -.035$, SE = .041), while the White female is evaluated as

more ethical in the WB ($M_{WB.IAT}$ = .129, SE = .054) and WH ($M_{WH.IAT}$ = 136, SE = .065) conditions.

There was also a trend level significant main effect on the AD D-score, $F(2, 282) = 2.56$, $p = .07$, $\eta_p^2 = .018$, see Table 54. This score represents the cross race and gender interaction (BH IAT= Black Male and Hispanic female, WB IAT = White Male with Black Females and WH IAT =White Male with Hispanic Females). The direction of the means indicates that for participants in the WB IAT, there was a preference for the White Male leader ($M_{WB.IAT}$ = .091, SE = .055), while for those in the BH and WH IAT condition, the Hispanic Female leader was preferred ($M_{BH.IAT}$ = -.061, SE = .042 and $M_{WH.IAT}$ = -.059, SE = .067). These results support an overall preference for female leaders except when it is Black female compared to White males.

Discussion

The results of this study showed us that for that when making evaluations of ethicality for leaders of different races and genders there was no real difference in reactions. The main effect in the White Hispanic condition gives us an idea that while there may be no differences in reactions for black and white leaders, when comparing White leaders with Hispanic leaders, participants have an implicit bias towards White leaders. Additionally, this study demonstrated that there is a general preference toward your own gender when evaluating the ethicality of the leader based on the main effects of the participants own gender and the gender/race of the leaders.

The non-significant results of the same race different gender ANOVAs indicate that participants evaluate leaders within the same race but across different genders similarly in ethicality. Mainly it seems that ratings comparing female leaders are similar,

while comparing males of different races, there is a White and Black advantage. Additionally, female participants evaluate minority leaders as higher in ethicality while, male participants evaluate White leaders as higher in ethicality.

Furthermore, these results indicate that when comparing Black to White leaders, minority participants prefer the Black leader. Interestingly, when comparing Hispanic and White leaders, all participants prefer the White leader. This could be a due to a sense of novelty comparisons. Traditionally in the US, white and blacks are the dominant comparison group in the social sciences (Hacker, 2010); however it is rare for whites and Hispanics to be compared (Riegle-Crumb, 2010). The result from this study demonstrate that when given a new leader comparison (Hispanics), participants evaluate whites as higher in ethics because that is the leader they are most familiar with, with is consistent with the theoretical foundation of this dissertation. The next study attempts to examine the full model of this theory using the connectionist framework by adding the layer of occupational context when evaluating leaders.

Study 4

The purpose of study 4 was to examine the role of context when evaluating a leader's ethicality, see Figure 3. This study adapted the Sy et al., (2010) study, which used a connectionist model to examine evaluations of White and Asian leaders. The current study expanded the ethnicities considered by Sy et al. (2010) to those of Black leaders. The current study utilized the occupations that were mentioned consistently for Black and White leaders in study 1. In the Sy et al. (2010) vignette, an Asian leader was described and evaluated as the most effective in a technical occupation and a White leader was highly evaluated in a Marketing or Sales position. The goal of this study is to

do the same for Black and White leaders. This study was a direct test of the connectionist framework by evaluating the role of context, leadership, ethnicity and ethics.

> *Hypothesis 8: White male leaders will be rated higher in ethicality for occupations rated as appropriate for Marketing contexts than will the other ethnic-female leader combinations for this context.*
>
> *Hypothesis 9: Perceptions of ethicality of the leader will not differ for White male leaders but will differ as a function of the occupation for Black and female leaders, such that White female leaders will be highly rated in Marketing context, while Black leaders will be highly rated in occupations which are regarded as appropriate (to be determined).*

Participants

Ideally for this study, MBA students were the preferred population to test the effects of this study. Beginning in November of 2013, faculty and staff listed as instructing MBA students were contacted to request the students in their current class and future class (spring semester 2014) to participate in the study. It was hoped that with a snowball sampling method, it would be possible to collect the 270 participants needed for this study. Faculty members from various from universities within a 100-mile radius of the University of Maryland were emailed first (see Appendix F for email advertisement). In total, 270 faculty members were contacted via email. The response rate was poor (only 30 participants completed the survey as of January 30th 2013). I then contacted colleagues who were teaching MBA classes in the fall and spring. In total by March of 2014, 115 MBA students initiated the study yet only 75 completed the study fully. To collect the final 200 participants needed, Study 4 was then posted on Amazon's Mechanical Turk®. Four hundred and forty-four participants were recruited from Mechanical Turk, with approximately 300 completing all measures of the study.

There were 252 participants who self-identified as White/European American or Caucasian (56.3%), 40 were Asian (8.9%), 36 were Black/African American (8%), 17 were Bi/Multi-racial (3.6%) and 11 were Hispanic/Latino. In terms of gender, 206 were female (46%), 106 were male (35.7%), with 82 non responsive. For educational attainment, 97 indicated that they had received a minimum of a high school diploma (21.7%), 67 had an Associate's degree (15%), 170 had a Bachelor's degree (37.9%), 15 had a Graduate degree (3.4%). In terms of age, 6 participants were under age 20 (1.3%), 171 were age 20-29 (38.2%), 91 were age 30-39 (20.3%), 35 were age 40-49 (7.8%), 33 were age 50-59 (7.4%) and 23 were age over 60 (5.1%). Mechanical Turk participants were paid on average $.25 and took approximately 18 minutes to complete the task.

Procedures

This study employed a 2 (ethnicity: Black, White) X 2 (Gender: Female, Male) X 3 (Context: Nurse, Marketing, Coach) between subjects experimental design. Participants were randomly assigned to one of 12 possible conditions (Black Female Nurse Manager, Black Female Marketing Leader, Black Female Coach, White Female Nurse Manager, White Female Marketing Leader, White Female Coach, Black Male Nurse Manager, Black Male Marketing Leader, Black Male Coach, White Male Nurse Manager, White Male Marketing Leader, and White Male Coach). Participants then completed a questionnaire about the leader including their impressions of the effectiveness or competence of this manager. Participants completed a the demographics and were debriefed.

Vignette. In each condition, participants were told that they were forming evaluations about a leader based on a short vignette (see Appendix G for study 4 stimuli).

They saw a photo[10] of the leader and read a vignette that was based on the Sy et al., (2010) study. The difference between the Sy et al. study and the current study was the ethnicity and context of the leader that was being evaluated. In the Sy et al study (2010), they were interested in understanding how the connectionist theory might explain differences in leader evaluations for Asian and White leaders. Specifically, they tested whether the Asian leader would be evaluated higher in context involving technical expertise (relating to stereotypes about Asians and Engineering) vs context that White leaders would be highly evaluated, as in Marketing. For the current study, each condition was randomly described the 6 experimental factors that could potentially affect leader evaluations: gender of leader (male or female), race of leader (black or white) and the context describing the leader (Coach, Nursing, Marketing).

Using the same names and pictures from study 2, participants read about a leader who was described as a graduate from the University of Arizona and marketing/nursing/physical therapy major. This leader was described as employed at the same organization/university and a Sales Manager/ Nurse Manager/Basketball Coach. They were described as managing a team, working with customer/patients and troubleshooting issues that come up. The length of the words were consistent as was the structure of the sentences, the only variation in the vignettes was to emphasize the context: coach had players as subordinates, nurse had subordinate nurses, and marketing involved customer or team members (see Appendix G for all the vignettes).

Measures

Ethicality of the Leader. The Ethical Leader scale (Brown et al., 2005) was used to test this construct. A confirmatory maximum likelihood factor analysis was conducted

on this scale using Mplus version 5.21 (Muthen & Muthen, 2007). A one-factor model fit the data acceptably well (χ^2 (35) 165.46 $p < 0.05$, χ^2/df = 4.7, RMSEA = 0.08, CFI = 0.95). While the chi-square test was significant and the χ^2 /df ratio was above the recommended cutoff of 3, the CFI was above the accepted cut-off of 0.90, and the RMSEA was at the accepted cut-off of 0.08, (Hu & Bentler, 1999). Additionally, the factor loadings for the items were acceptable, with all items loading above 0.40 on the factor (shown in Table 58). Thus, there appears to be support for the unidimensionality of this scale in my data. The Cronbach's alpha for this scale was 0.94.

General Leader Perceptions and Leader Effectiveness. The General Leader Impression Scales (Cronshaw & Lord, 1987; Lord, 1977) and perception of leader effectiveness (Bass et al., 2003) leader was utilized for this study. Using Mplus version 5.21 (Muthen & Muthen, 2007), a confirmatory maximum likelihood factor analysis was conducted using a two-factor model that fit the data acceptably well (χ^2 (5) = 28.24 χ^2/df = 5.64, $p < 0.05$, RMSEA = 0.10, CFI = 0.97). While only one out of the 3 indices were within recommended levels, the factor loadings for the items were acceptable, with all items loading above 0.40 on the factor (shown in Table 58) and the Cronbach's alphas for the GLI scale was 0.87 and leader effectiveness was 0.84. Thus, there appears to be somewhat limited support for the multidimensionality of these scales in my data.

Demographics. Participants completed demographic information such as age, race, gender, socio-economic status and the participant's previous work and leadership experience.

Results

MBA vs. Mechanical Turk Participants

To investigate how the MBA and Mechanical Turk (MT) participants might have evaluated the leaders differently, a one way ANOVA with the sample as a fixed factor and the leadership measures (ethicality, GLI, and effectiveness) was conducted. These results showed that there was a significant difference in how MBA and MT participants responded on these variables (see Table 59 for the full ANOVA results). To determine what about the two samples were driving the statistical differences, the demographic variables (gender, age, education, ethnicity and socio-economic status) were added as covariates. Table 60, 61 and 62 demonstrates that most statistical differences between the two samples disappear when gender and ethnicity are added to the ANOVA as a covariate. Consistent with the previous studies analysis, the participant's ethnicity and gender were added to the following ANOVAs.

Preliminary Analysis

Table 63 provides the means, standard deviations and bivariate correlations of the primary variables in this study. There were several expected significant correlations among the variables. As can be seen from this table, the leadership measures were highly correlated and in the expected direction, $p's < .01$. These relationships provided initial evidence that there would be underlying support for further data analysis.

Testing the Hypotheses

Hypothesis 8 predicted that White male leaders would be rated higher in ethicality in the Marketing context over the other ethnic/gender leaders. To test Hypothesis 8, a between subjects ANOVA was conducted with participant race and gender incorporated.

A 2 (Leader Gender: Male, Female) X 2 (Leader Ethnicity: Black, White) X 3 (Occupational Context: Coach, Nurse, Marketing) X 2 (Participant Ethnicity: Black, White) X 2 (Gender of Participant: Male, Female) ANOVA on the perceptions of leader ethicality, see Table 64. There were no statistically significant main effects or interactions on ethical leadership. There were trend level significant main effects and interactions that will be detailed due to the importance of this variable for this dissertation. There was a main effect of context, $F(2, 286) = 2.60$, $p = 07$, ŋp2 =.021 on ethical leadership. The direction of the means indicates that Coaches were evaluated the highest in ethical leadership ($M_{Coach} = 5.48$, SE = .140), followed by Marketing managers ($M_{Marketing} = 5.11$, SE = .133), then Nurses ($M_{Nurses} = 4.88$, SE = .160).

There was also a two way interaction between the occupational context and the participant's gender, $F(2, 286) = 2.66$, $p = 07$, ŋp2 =.021, see Figure 28. Based on the means, Coaches were rated the highest in ethical leadership for male and female participants ($M_{MaleP.Coach} = 5.48$, SE = .214, $M_{FemaleP.Coach} = 5.48$, SE = .184). For male participants, they rated Marketing managers ($M_{MaleP.Marketing} = 5.02$, SE = .228), as higher in ethical leadership compared to Nurses ($M_{MaleP.Nurses} = 4.66$, SE = .241). Interestingly, female participants rated Marketing managers ($M_{FemaleP.Marketing}$= 5.18, SE = .151) as similar to nurses ($M_{MaleP.Nurses} = 5.07$, SE = .213) in ethicality. This indicates that for male participants there is a larger degree of difference in leader ethicality depending on the context with nurses being significantly less ethical than coach or marketing leaders.

Additionally, there was a two way interaction between context and ethnicity of participant on ethical leadership, $F(2, 286) = 2.66$, $p = 07$, ŋp2 =.011, see Figure 29. As can be seen from this figure, Male and female participants rate White leaders pretty

similarly in ethical leadership ($M_{MaleP.WhiteL}$= 5.29, SE = .178, $M_{FemaleP.WhiteL}$= 5.09, SE = .154). Interestingly, female participants rate Black leaders higher in ethical leadership ($M_{FemaleP.BlackL}$= 5.42, SE = .141) compared to male participants ($M_{MaleP.BlackL}$= 4.90, SE = .189).

Finally, there was also a three way interaction between gender of the leader, occupational context and the ethnicity of the participants on ethical leadership, $F(2, 286) = 2.73$, $p = 09$, ŋp2 =.011, see Figure 30. As can be seen from this figure, White participants rated the different gender and occupational contexts as similar in ethical leadership. Interestingly, Black participants evaluate Nurses the lowest in ethical leadership and Coaches as high in ethical leadership. Black participants evaluate female marketing managers as higher in ethical leadership compared to male marketing managers.

While not statistically significant, the direction of the means of the three way interaction of Race and Gender of the Leader and Context, indicate that White male leaders were rated highest in ethical leadership in the Coach context ($M_{WhiteMaleCoach}$= 5.43, SE = .290) followed by the Marketing context ($M_{WhiteMaleMarketing}$= 5.13, SE = .249) and rated the lowest in the nurses context ($M_{WhiteMaleNurse}$= 5.07, SE = .329). Overall, Black female coaches were given the highest ethical leadership ratings ($M_{BlackFemaleCoach}$= 5.43, SE = .290) followed by the Black Male Coaches ($M_{BlackMaleCoach}$= 5.52, SE = .246) compared to White male leaders. Coupled with the above interaction results, this indicates that White males are not considered the most ethical leaders, contradicting Hypothesis 8. Therefore, Hypothesis 8 was not supported.

Hypothesis 9. Based on the connectionist theory of leadership (Lord et al., 2001; Lord et al., 2001), Hypothesis 9 predicted that perceptions of the ethicality of the ethnic/gender leaders will differ as a function of the occupational context the leader is working within. Specifically, it was predicted that White female leaders would be rated highly in marketing contexts and that minority leaders would be rated higher in occupations that are considered consistent with their leadership style (Hanges et al., 2000; Hogue & Lord, 2007). Unfortunately, there were no statistically significant main effects or interactions that pertain to this hypothesis on ethical leadership.

Once again reviewing the direction of the means on the three way interaction of Race and Gender of the Leader and Context (not statistically significant), indicates that Black male leaders were rated highest in ethical leadership in the Coach context ($M_{BlackMaleLCoach}$= 5.52, SE = .246) followed by the Marketing context ($M_{BlackMaleLMarketing}$= 4.88, SE = .288) and rated the lowest in the nurses context ($M_{BlackMaleLNurse}$= 4.67, SE = .282). The direction of these means are consistent with the connectionist theory literature. Additionally, Black female leaders were evaluated as higher in Coach context ($M_{BlackFemaleLCoach}$= 5.60, SE = .285) followed by Marketing ($M_{BlackFemaleLMarketing}$= 5.40, SE = .288) and Nursing ($M_{BlackFemaleLNurse}$= 4.92, SE = .342). I expected that for the female leader condition the Nursing context would be the highest for ethical leadership, so the direction of these means contradict the Connectionist theory. Similar to Black female leaders, White female leaders were rated highest ethicality in the Coach context ($M_{WhiteFemaleLCoach}$= 5.36, SE = .285) followed by Marketing ($M_{WhiteFemaleLMarketing}$= 5.00, SE = .219) and Nursing ($M_{BlackFemaleLNurse}$= 4.93, SE = .335). Therefore, Hypothesis 9 was not supported.

Leadership Measures

This study was also acted as an additional test of Hypothesis 4. Hypothesis 4 predicted that White male leaders would be evaluated higher in effectiveness and GLI compared to the other ethnic-gender leader combinations.

Leadership Effectiveness. To test Hypothesis 4, a between subjects ANOVA was conducted with participant race and gender incorporated. A 2 (Leader Gender: Male, Female) X 2 (Leader Ethnicity: Black, White) X 3 (Occupational Context: Coach, Nurse, Marketing) X 2 (Participant Ethnicity: Black, White) X 2 (Gender of Participant: Male, Female) ANOVA on the perceptions of leader effectiveness, See Table 65. There was a significant main effect of context on leadership effectiveness, $F(2, 286) = 7.27$, $p < .001$, ηp2 =.057. Specifically, Coaches were seen as highest in leadership effectiveness (M_{Coach}= 4.21, SE = .104), followed by Marketing leaders ($M_{Marketing}$= 3.75, SE = .095) then Nurses (M_{Nurses}= 3.69, SE = .112). Additionally, there was a two way interaction between context and participant ethnicity, $F(2, 286) = 5.43$, $p < .001$, ηp2 =.043, see Figure 31. As can be seen by this figure, White participants rated leaders in all three context the same, while Black participants rated Coaches much higher in effectiveness, than the Marketing and Nurse Leader.

While statistically significant, this information does not clarify how White males are perceived compared to the other leaders. The direction of the means of the Race and Gender Leader interaction (non-significant), ranks White Males (M_{WM}= 4.00, SE = .116), White Females (M_{WF}= 3.91, SE = .117), Black Females, (M_{BF}= 3.87, SE = .120), then Black Males (M_{BM}= 3.79, SE = .123). Potentially, this information suggests that Hypothesis 4 might be supported in this study.

GLI. To test Hypothesis 4, a between subjects ANOVA was conducted with participant race and gender incorporated. A 2 (Leader Gender: Male, Female) X 2 (Leader Ethnicity: Black, White) X 3 (Occupational Context: Coach, Nurse, Marketing) X 2 (Participant Ethnicity: Black, White) X 2 (Gender of Participant: Male, Female) ANOVA on GLI was conducted, See Table 66. There was a significant main effect of context on GLI, $F(2, 286) = 5.02$, $p < .01$, $\eta p2 = .040$. Once again, Coaches were seen as highest in GLI (M_{Coach}= 4.94, SE = .105), followed by Marketing leaders ($M_{Marketing}$= 3.51, SE = .100) then Nurses (M_{Nurses}= 3.44, SE = .119). There were no other significant main effects or interactions for this variable. The mean direction of the Leader race and Gender were too close to suggest support or not for Hypothesis 4. Taken all together, these results confirm that Hypothesis 4 was not supported.

Controlling for Leader Prototypicality or Perceived Effectiveness. Hypothesis 5 predicted that once the leader prototypicality or effectiveness was controlled for, there would not be any differences between the White male leaders and the other ethnic/gender leaders. Based on previous results, Hypothesis 5 was supported for this study. Similar to Study 2 results any previously significant main effects and interactions were eliminated by adding the GLI to the ANOVAs. White male leaders (and White leaders all together) are evaluated the same on Black leaders on variables such as GLI and effectiveness. Thus, Hypothesis 5 is supported.

Discussion

The goal of study 4 was to complete the full theoretical model and to examine how participants evaluate the ethicality of leaders by investigating the role of context and participant's own ethnic group on their judgments. It was assumed that Black leaders

would be evaluated highly in contexts (Coach), that were viewed as consistent with participant's expectations of the leaders race-occupation fit (Sy et al., 2010). Similarly, it was assumed that female leaders would be positively evaluated in consistent female contexts such as nursing. Black leaders and female leaders were therefore expected to be evaluated poorly in context that were inconsistent with their race/gender-occupation fit such as marketing, which would be considered ideal for a White male leader. Unfortunately, study 4 did not confirm the predicted results. Coaches were viewed as the most ethical context across the ethnicities and genders by all of the participants (regardless of their race and gender). For White male leaders, White male coaches were evaluated higher in the coach context vs. the marketing context. Interestingly, these results do not replicate the findings in the Sy et al., (2010) paper which found that White males were viewed as most effective in marketing context. Even for female leaders there was a main effect for context and they were rated higher as coaches than nurses, which is interesting since a recent US poll indicated that Nurses are the most trusting profession in 2014 (Rassmusan Report, 2014).

For ethicality, coaches were viewed as the highest in ethicality compared to nurses and marketing leaders. While this was expected for the Black Male condition, it was not expected for both the Black and White female leader condition and the White male leader condition. Therefore, study 4 was not a successful replication of the Sy et al., study nor was it a successful extension of the connectionist theory as it pertains to ethicality.

Chapter 3: General Discussion

Prior to this dissertation, there was a significant gap in the leadership literature to address perceptions of minorities and female leaders (Rosett et al., 2009; Vinkenburg, Marloes, van Engen, Eagly & Johannesen-Schmidt, 2011). Particularly, it was unclear how perceivers evaluate these leaders in comparison to the normative leader (White male) on important characteristics such as ethicality and effectiveness. Ultimately, the goal of this dissertation was to answer this question. While the results of these studies generally contradict the predicted hypothesized direction (see Table 67), important insight was gained about the current leadership prototype and what this means about evaluating ethnic/gender leaders. In this dissertation, I tested how participants perceive of ethnic/gender leaders across 4 studies with various methodologies. In Study 1, a mixed method approach was used to first generate a comprehensive list of CABs to describe leaders then rate these leaders on level of prototypicality of these CABs. In Study 2, a resume experiment was conducted to gauge how leaders are evaluated when very little information is offered about them (just a generic resume and a picture). In Study 3, an implicit association test was utilized to capture implicit reactions and ethicality preferences for different ethnic/gender leaders. Finally, in Study 4, the occupational context was added to understand if there are specific situations that facilitate expectations about ethnic/gender leaders. The results of these studies added to the extant connectionist literature by the testing the activation process of the leader category as it relates to the characteristics, attributes and behaviors of a leader's ethics, ethnicity, gender and surrounding context.

Study 1 demonstrated there was a distinct difference in the types of characteristics, attributes and behaviors that ethnic/gender leaders have. In a test of 350 CABs, there was indeed a significant interaction between the race and gender of the leaders on important CABs. While the ethnic leaders were not seen as synonymous with nonleaders, female and minority leaders were viewed as more religious and communal than white male leaders. Interestingly, this study found that White females were perceived of as more agentic than the traditional white male leader.

Study 2 found that participants were more likely to evaluate leaders from their own race or gender higher than out-group leaders. Minority participants rated minority leaders the highest, while White females rated White leaders the highest in the various leadership outcomes. Interestingly, the gender of the leader played the strongest role in their evaluations. Specifically, female participants evaluated female leaders highly, and were biased toward their own racial group leader. Males on the other hand, had high ratings of female leader but were in general much harsher on Hispanic leaders compared to the leaders from other races. While not supporting the predicted hypothesis that White male would be rated higher in Leaders CABS (agentic, assertive, etc), this study did support the hypothesis that minority and female leaders are considered more relational and religious than White male leaders. Additionally, this study provided the surprising results that White females garner the highest leader prototypicality ratings compared to the other ethnic/female leaders. The results of this study a contrary to recent research which found that female leaders were evaluated as less effective or promotable compared to male leaders (Eagly & Carli, 2007; Eagly & Karau, 2002:, Ragins & Sundstrom, 1989; Wirth, 2001).

Study 3 found that while the ethicality preferences between White and Black leaders by evaluators are not as distinct as first predicted, it was the ethical evaluations of Hispanic leader that were starkly different. While Study 4 revealed some evidence for the occupational context effect, White males were seen as higher in the Coach condition not the marketing condition like in the Sy et al. (2009) study. In the future, this study should be replicated with a different context (coach had a ceiling effect across all race/genders of the leaders) and should be expanded to include Hispanic leaders.

Across all four studies, there was a significant gender of participant effect. Female participants were more generous with their evaluations than males. Female participants were also very supportive of female leaders. Male leaders were also likely to rate female leaders positively, but were less consistent across the studies. Additionally across the studies, female participants evaluated minorities higher than male participants. In part, this could be due to the awareness of how female and minority leaders struggle for legitimacy, that male participant might be unaware of (Marger, 2011).

Additionally these studies demonstrated a strong matching evaluation between majority and minority members. Minority participants rated minority leaders positively (Black participants were the most consistent and more likely to rate Black leaders the highest), while White participants (mainly white female participants) rated White leader higher than the other leaders. These results are consistent with previous studies that have found that participants provide higher rating for those in their own racial background compared to others (Bass, 1990; 2008; Kraiger & Ford, 1985).

Limitations, Future Directions and Conclusions

Overall, the results of these studies are encouraging for how Black individuals are perceived of by the current population. Based on these studies, Black leaders are viewed as simultaneously effective and trustworthy. Additionally female leaders (specifically, White female leaders) are perceived the highest in ethicality and effectiveness. From these studies, we can conclude that leadership perceptions have shifted to be more inclusive of minorities and females such that they may hold similar levels of activation in the leader prototype. One reason for this may be due to the prominence of President Obama. How individuals responded to the IAT and the intolerance measures indicate that the liberals might be overcompensating when rating ethicality of Hispanics compared to Blacks. This could be a reflection of the current political or media representations of Hispanics and Blacks that we have today. We have come to associate more positive perceptions of Blacks by having Obama as a Black president and Michele Obama as the first lady. The results from this study could be a reflection of the "post-Obama" world that we live in where explicit race issues with Blacks is seen as a nonissue while there is growing turbulence with Hispanic relations. Interestingly, these results could be a bi-product of where the participants are in the US, with those in states bordering Mexico, demonstrating social desirability IAT scores as they rate Hispanics higher in ethicality. Unfortunately, it is an unknown how state location could have affected the data for this study, since that information was not collected.

While he may not be liked or trusted by all members of the populous, his presence as a leader expands the normative expectations of what a leader looks like to include Black males and potentially, Michelle Obama doing the same for Black females

(McIlwain, 2007; McGinley, 2008). These results suggest that Obama represents the current target that activates individual's construction of their leader prototype (Fraser & Lord, 1988, Foti et al., 1982). It seems that the current theory which utilized a connectionist framework, demonstrated that minorities (specifically, Black) currently are included in the leader prototype.

Even as this study demonstrates a positive evaluation on Black leaders in these situations, the distinction between held attitudes and behaviors from the discrimination literature cautions that we should not jump to conclusions (Dovidio, Pearson, Gaertner, & Hodson, 2008). Onwuachi-Willig, and Barnes, (2012) found that while the perception of racism and discrimination has decreased since Obama became the president, there has continued to be the same level of discrimination lawsuits. They also find that the explanation or excuses given for why certain behaviors were not discriminatory were because of an "I voted for Obama" mindset. This indicates that while there has been an increase in acceptance of Blacks as leaders, there is still prejudice and discriminating behaviors towards Black in the workplace. The behaviors and attitudes are still inconsistent and therefore should be investigated further.

Additionally, it is possible that female leaders have eclipsed White male leaders in terms of effectiveness and desirability. These results demonstrate that Schein's (1973) "think manager-think male" theory is no longer an accurate understanding of leadership. While in the past White Female may have been seen as caring and warm, based on these results they are also seen as a highly preferred leader to work with.

Future leadership studies should be more inclusive of minorities that are not typically focused on as experimental populations, Asian, Native American and Hispanic

more extensively. Overwhelmingly, the first three studies found the majority of the reaction to leaders as viewed as the difference between the other leaders and the Hispanic leader (mainly Hispanic Male).

A limitation of this dissertation is the problematic measures that were utilized in all 4 studies. While all of the measures were previously published and validated, the factor analysis revealed that there were issues with whether these items adequately represented the constructs of interest for this dissertation. Future studies should use more established measures to assess how participants evaluate leaders. Additionally, the manipulations used for Studies 2 and 4 may not have been strong enough to prompt a response from the participants. While these paradigms were altered from previously established empirical studies, there might have been enough variation in the manipulations that they weren't strong enough. Additional studies should be conducted with more elaborate manipulations, to test how participants evaluate different ethnic/gender leaders on variables such as ethicality, GLI and effectiveness.

Indeed for Study 4, a study that tested evaluations without the Coach context is necessary. There was a ceiling effect of coaches which may have overwhelmed the true role of the context on leader evaluations. Additionally, this study should be adapted to compare reactions to Hispanic leaders and context. It would also be interesting to see if a more direct replication of the Sy et al. (2010) study with Asian leaders would result in different evaluations of ethicality. When people evaluate leaders on concepts of ethicality, it might be difficult to do so without specific anchors like explicitly behaviors or attitudes to base their judgments on (Prottas, 2008). More studies are needed to investigate this topic.

An additional concern about this dissertation is the nature of the samples used in all 4 studies. While Mechanical Turk has been tested for potential sample issues (Buhrmester et al., 2011; Paolacci & Chandler, 2014), this sample continues to represent the liberal and higher educated side of the population (Berinsky, Huber, & Lenz, 2012). To fully test the current theory, it would be ideal to have a more varied selection of participants from the US. While Mechanical Turk has been shown to be equivalent to other convenience samples (e.g. college students, see Berinsky, Huber, & Lenz, 2012 for a full review), participants who had an established working history and are more representative of the US population would be best.

Finally, it would be of interest to recruit specific populations to examine these paradigms on. In future studies actively recruiting Black, Hispanic and Asian participants would be of primary concern. It would also be interesting to gather information about the location of participants. Since the reaction to Hispanic leaders were so strong, it would be interesting to know if this is a general trend across the US or if there is a location effect (along the Mexico border or in states that have a high Hispanic population). Unfortunately, this question was not investigated in the current dissertation.

Conclusion

The purpose this dissertation was to expand our current understand leadership from the basic category of leader which relies on the White male as the standard. Since our country is becoming more and more diverse it is important to know how perceptions of ethnicity alter (or do not alter) the leader ideal. With such a dramatic shift in the working population of the US, it has become crucial to understand how the perceptions of prototypical leaders can be affected by ethnicity. This dissertation demonstrated that our

expectations of leaders have shifted and we evaluate Black and White leaders similarly. A true strength of this dissertation is the usage of mixed methodologies with the study 1 qualitative design, the study 3 implicit experimental design and studies 2 and 4 between study methodologies. This dissertation utilized a wide range of methodologies to examine how ethnic/gender leaders are viewed on important dimensions such as ethicality.

Overall, these results demonstrates that our leadership prototype in not exclusive to just White males, but is composed of (and can be applied to) minorities and females. Additional research is needed to understand the full range of responses to minorities (Hispanic and Asian leaders need to be included in future studies). The connectionist framework relies on the previous experiences of the observer and societal expectations to interpret a leader and frames evaluations within the context they are occurring. This study demonstrated that who we are plays a crucial role in how we evaluate others. The overall matched ratings between participants and leaders, demonstrates that social identity is essential in our evaluation of others. By understanding how evaluators own ethnicity and gender shifts these evaluations, we gain a more nuanced understanding of how ethics may rest not just in the leader but also in the beholder.

Footnotes

[1]Prototypes and schemas are not the same but they do both represent the cognitive formation that takes place when individuals are categorizing natural phenomena (Fiske & Taylor, 1991; Rosch, 1975). Therefore, for the purposes of this dissertation I will primarily utilize the terminology of prototype or prototype formation to keep it consistent with the language of the paper and to minimize potential confusion.

[2]Recently, there has been a focus on the theory of shared leadership, which considers the psychological construct of leadership by decomposing the tasks and functions of a leader as diffuse amongst the team instead of within a single entity (Kozlowski & Bell, 2003). The current dissertation primarily emphasizes how perception of a single leader influences various outcomes and does not focus on the team level strata that the construct of shared leadership emerges. Future research will be needed to extend the present work to the team level and the construct of shared leadership.

[3]Phrases and inappropriate words that could not be considered descriptors (for example, whole Wikipedia passages were provided from one participant and racially charged words were deleted for several leaders.

[4]Conducting 350 Analysis of Variance increases the concern about Alpha inflation. There is a worry that there might be significant results reported that are not actually there. I controlled for alpha inflation by using the Bonferonni alpha family wise comparison test. Setting the alpha at .001 $\alpha^* = 1 - (1 - \alpha)^{350} = (1 - .704)^{350} = .295$ or 30% chance of making a type one error. While this level of type 1 error rate is within acceptable bounds (Kirk, 1982), this is unlikely to be a concern for this project due to the fact that the CABs are highly correlated and this was a within subject task.

[5]I did not attempt to recruit specific participants and unfortunately, there were no Hispanic males in the Black leader condition. Throughout this study, there will be no data points for their ratings of these leaders.

[6]Additional analysis revealed no significant difference in reactions on the important variables of interest with the all the participants added in the model.

[7]The benefit of the Inquisit software is that it allows participants to complete the task in their own homes and is compatible with all types of operating systems (Mac, PC) (Inquisit, 2014). Simcox and Fiez (2014) also used the amazon platform to collect response times on various measures using these programs.

[8]There were 100 participants who provided inconsistent codes which resulted in a loss of data between the survey and the IAT task

[9]There were no Black Female participants in this IAT condition.

[10]The names and faces of the leader were the same as in study 2.

Appendix A

Study 1a Survey:

Project Title	**Perceptions of Leadership**
Purpose of the Study	*This research is being conducted by **Rabiah Muhammad and Dr. Paul Hanges** at the University of Maryland, College Park. We are inviting you to participate in this research project because you are at least 18 years of age and have at least 6 months previous work experience. The purpose of this research project is to learn more about how individuals evaluate leaders from different contexts.*
Procedures	*The procedures involve either a) generating a list of descriptors about a leader, b) reading a biography and evaluating a leader, c) providing your first thoughts about a leader that is shown to you, or d) reading a short story about a leader and providing an evaluation of that leader. This research will take no longer than one single hour-long session. For your participation, you will either participate for extra credit as part of a class requirement or for monetary value (up to $1.00).*
Potential Risks and Discomforts	*There are no known risks associated with this study.*
Potential Benefits	*There are no direct benefits to participants. We hope that, in the future, other people might benefit from this study through improved understanding of how individuals may evaluate leaders from different contexts and what factors play a role in these evaluations.*
Confidentiality	*Any potential loss of confidentiality will be minimized by storing all data collected in password-protected computers and locked filing cabinets and storage areas. Both electronic and paper-based data will be identified with subject numbers, not your name or any other ID numbers. The data is expected to be stored during the length of this research study. Moreover, the study will make every effort to keep your personal information confidential. To help protect your confidentiality: (1) your name will not be included in the questionnaires and other collected data; (2) participant numbers will be used in the questionnaires and other collected data; and (3) only the researchers will have access to the identification key and the data. All data will be destroyed after 5 years.* *If we write a report or article about this research project,*

Project Title	Perceptions of Leadership
	your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law. Even though we will take every effort to protect your privacy, a breach of confidentiality may become a risk due to unforeseen events.
Medical Treatment	*The University of Maryland does not provide any medical, hospitalization or other insurance for participants in this research study, nor will the University of Maryland provide any medical treatment or compensation for any injury sustained as a result of participation in this research study, except as required by law.*
Right to Withdraw and Questions	*Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.* *If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:* ***Rabiah Muhammad [1147 Biology-Psychology, College Park, MD, 20742; 301-405-5934; rabiahm@umd.edu] or Paul Hanges [1147 Biology-Psychology, College Park, MD, 20742; 301-405-5930; phanges@umd.edu]***
Participant Rights	*If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:* **University of Maryland College Park** **Institutional Review Board Office** **1204 Marie Mount Hall** **College Park, Maryland, 20742** **E-mail: irb@umd.edu** **Telephone: 301-405-0678** *This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.*

Project Title	**Perceptions of Leadership**	
Statement of Consent	*Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.* *If you agree to participate, please sign your name below.*	
Signature and Date	**NAME OF SUBJECT [Please Print]**	
	SIGNATURE OF SUBJECT	
	DATE	

Instructions. The purpose of this survey is to gather information about what you perceive as essential in a Leader. The idea is to gather your first impressions so anything that comes to mind will be exactly what we are looking for.

For example, if you were to provide descriptors for a tire, you would list:

1. *Round*
2. *Attached to a vehicle*
3. *Rubber*
4. *Wide*
5. *Durable*
6. *Bouncy*
7. *Tread*

We would like you to provide descriptors for 3 different types of leaders. If you are able to generate 20 unique descriptors at least two of the three leaders you will receive a bonus of $.25. These descriptors cannot be incomplete words or nonsense words. A descriptor is a word that serves to describe or identify an item. You will receive your bonus after your 20 descriptors have been reviewed.

You will have 5 minutes to complete each leader (15 minutes total), when you are ready to begin click to the next page. (If you complete the task before 5 minutes please click the next button, you will be unable to go back so proceed carefully!)

Leader Instructions: Please provide as many descriptors (up to 20) that you can think of to describe a BLANK Leader. (Blank = Leader Condition: Black Female, Black Male, White Female, White Male, Hispanic Female, Hispanic Male).

1. Descriptor _____
2. Descriptor _____
3. Descriptor _____
4. Descriptor _____
5. Descriptor _____
6. Descriptor _____
7. Descriptor _____
8. Descriptor _____
9. Descriptor _____
10. Descriptor _____
11. Descriptor _____
12. Descriptor _____
13. Descriptor _____
14. Descriptor _____
15. Descriptor _____
16. Descriptor _____
17. Descriptor _____
18. Descriptor _____
19. Descriptor _____
20. Descriptor _____

Instructions: Please think of 5 different types of occupations this leader would be suitable for.

1. Occupation_____
2. Occupation_____
3. Occupation_____
4. Occupation_____
5. Occupation_____

What do you imagine would be this leader's name?

1. Name_____
2. Name_____
3. Name_____
4. Name_____
5. Name_____

Nonleader Instructions. Similar to the previous task, we would like you to generate descriptors for to identify different occupations. In the next page you will be asked to generate descriptors for 2 different occupations.

Once again, if you were to provide descriptors for a tire, you would list:
1. Round
2. Attached to a vehicle
3. Rubber

4. *Wide*
5. *Durable*
6. *Bouncy*
7. *Tread*

You will have 5 minutes to complete each occupation (10 minutes total), when you are ready to begin click to the next page. (If you complete the task before 5 minutes please click the next button, you will be unable to go back so proceed carefully!)

Instructions: Please provide as many descriptors (up to 20) that you can think of to describe a BLANK. (BLANK = Nonleader condition: Actor, Factory Worker, Musician, Nurse, Union Member, Sales Person).

Instructions: *Please provide as many descriptors you can think of to describe an ETHICAL PERSON. Anything you think of that reminds you of what an ethical person should be listed.*

Demographics:

We would like to ask you a few questions about your thoughts on this study:

1. First, did you find any of the procedures unusual or weird?
2. Did anything about the procedures seem suspicious?
3. What do you think the researchers were investigating?
4. What do you think is the hypothesis of the study?
5. Did any of the procedures seem related to each other in any way? How so?
6. Do you have any other feedback you would like to provide to the researchers?

Grade:

What is the highest grade (or year) of regular school you have completed? (Choose one.)							
Elementary School	❍ 1	❍ 2	❍ 3	❍ 4	❍ 5	❍ 6	❍ 7	❍
High School	❍ 9	❍ 10	❍ 11	❍ 12				
College	❍ 13	❍ 14	❍ 15	❍ 16				
Graduate School	❍ 17	❍ 18	❍ 19	❍ 20+				

Degree:

Select the highest degree you have earned:

❍ High school diploma or equivalency (GED)
❍ Associate degree (junior college)
❍ Bachelor's degree
❍ Master's degree
❍ Doctorate
❍ Professional (MD, JD, DDS, etc.)
❍ Other specify
❍ None of the above (less than high school)

Language:

Is English your primary language?

❍ Yes
❍ No

Language Other:

If English is not your primary language, please type in your primary language:

❍ _____

In which country did you grow up?

❍ _____

CountryLiv:

In which country do you currently live?

❍ _____

Earnings:

How much did you earn, before taxes and other deductions, during the past 12 months?

- ❍ Less than $5,000 (1)
- ❍ $5,000 through $11,999 (2)
- ❍ $12,000 through $15,999 (3)
- ❍ $16,000 through $24,999 (4)
- ❍ $25,000 through $34,999 (5)
- ❍ $35,000 through $49,999 (6)
- ❍ $50,000 through $74,999 (7)
- ❍ $75,000 through $99,999 (8)
- ❍ $100,000 and greater (9)
- ❍ Don't know (10)
- ❍ No response (11)

Age:

Please enter your current age in years.

❍ _____

Please enter your race/ethnicity. You may check more than one.

- ❑ White/European American/Caucasian
- ❑ Black/African American
- ❑ Hispanic/Latino
- ❑ Asian/Asian American
- ❑ Native American/American Indian
- ❑ Arab/Middle Eastern
- ❑ Other

Please estimate the socioeconomic status of your parent(s) or guardian(s).

- ❍ Underclass (poor, unemployed)
- ❍ Working Poor
- ❍ Working Class
- ❍ Middle Class
- ❍ Upper Middle Class
- ❍ Upper Class

Debriefing:

In the current study, we are specifically investigating how someone may categorize a leader from different racial-ethnic background and gender, and how this might influence perceptions of their ethicality. We predict that due to the societal expectation of leaders, minority and female leaders will be evaluated less ethically (and other leader evaluations) compared to white male leaders. We do not believe that this is an indication of anything other than the normative experiences most individuals may have. Therefore, we are also considering how our participants' previous experiences with leaders and how the context that surrounds the leader may vary.

You took part in 1 of 4 studies: you helped to generate the necessary descriptors used to describe leaders of different ethnicities, genders and contexts. You also rated how prototypical these descriptors were for the leader you were exposed to. You also provided information on what is an ethical person. Or you were provided with a description of a leader that varied in terms of their gender and ethnicity (White, Black, or Hispanic) and we gathered information about how you rate these leaders on a variety of outcomes, including ethicality. Or you took part in an online implicit assessment of different leaders and were asked to assign descriptors to a particular leader, choosing between two leader options. Or you were given a short story about a leader and asked to rate that leader. Specifically, the situational context (occupation) and ethnicity (specifically Black v. White) and gender were manipulated.

These studies represent the first empirical investigation of leader ethicality through the lens of ethnicity and gender. We must emphasize that we are primarily interested, not in your individual reaction, but in how the condition you are in compares to other conditions. At no point is your individual response specifically evaluated. If you have any further questions about this study please do not hesitate to contact the investigators (Rabiah Muhammad rabiahm@umd.edu, 301-405-5934 or Paul Hanges: phanges@umd.edu, 301-405-5930). If counseling services are required, please inform the experimenter who will provide you with contact information to your local counseling resource.

Appendix B

Study 1b survey:

- Same Consent form as in Appendix A.

Leader Instructions. For this task you will be asked to evaluate whether specific descriptors (attributes, behaviors or characteristic) fit with your ideal image of a specific type of leader. You will be exposed to 80 different descriptors and two types of leader. Please respond quickly to each word using your gut instinct on whether the descriptor fits or does not fit in with your image of that leader.

Leader Instructions: *Using the scale below, rate how well the following descriptors fit in with your image of* BLANK (Blank = Leader Condition: BM, BF, WM, WF, HM, HF).

1	2	3	4	5
Does not fit my image		Somewhat fits my image		Fits my image very well

80 randomized CABs from Table 2 1 2 3 4 5

Nonleader Instructions. For this next task you will be asked to evaluate whether specific descriptors (attributes, behaviors or characteristic) fit with your ideal image of a specific occupation. Similar to what you completed before, you will be exposed to 80 different descriptors and one type of occupation. Please respond quickly to each word using your gut instinct on whether the descriptor fits or does not fit in with your image of that occupation.

Nonleader Instructions: *Using the scale below, rate how well the following descriptors fit in with your image of* BLANK (Blank = Nonleader Condition: Actor, Factory Worker, Musician, Nurse, Union Member, Sales Person).

1	2	3	4	5
Does not fit my image		Somewhat fits my image		Fits my image very well

80 randomized CABs from Table 2 1 2 3 4 5

Ethical Person Instructions: *Using the scale below, rate how well the following descriptors fit in with your image of* an Ethical Person.

1	2	3	4	5
Does not fit my image		Somewhat fits my image		Fits my image very well

80 randomized CABs from Table 2 1 2 3 4 5

- Same demographics and debriefing as in Appendix A.

Appendix C

Pilot Stimuli

Black Female 1.

Black Female 2.

Black Female 3.

Black Female 4

Black Female 5.

Black Female 6.

Black Male 1.

Black Male 2.

Black Male 3.

Black Male 4.

Black Male 5.

Black Male 6.

Hispanic Female 1.

Hispanic Female 2.

Hispanic Female 3.

Hispanic Female 4.

Hispanic Female 5.

Hispanic Female 6.

Hispanic Male 1.

Hispanic Male 2.

Hispanic Male 3.

Hispanic Male 4.

Hispanic Male 5.

White Female 1.

White Female 3.

White Female 5.

White Female 4.

White Female 2.

White Male1.

White Male 3.

White Male 5.

White Male2.

White Male 4.

Below you will see a list of names. Please choose a name that best fits your image of a White Male leader.								
#	Question	Does not fit my image at all		Somewhat fits my image		Fits my image very well	Total Responses	Mean
1	Kyle Burnett	2	2	5	18	5	32	3.69
2	Todd Johnson	0	3	8	14	7	32	3.78
3	James Donovan	1	1	3	13	14	32	4.19
4	Larry Taylor	4	6	9	9	4	32	3.09
5	Brett Carmichael	1	3	8	12	8	32	3.72

Statistic	Kyle Burnett	Todd Johnson	James Donovan	Larry Taylor	Brett Carmichael
Min Value	1	2	1	1	1
Max Value	5	5	5	5	5
Mean	3.69	3.78	4.19	3.09	3.72
Variance	1.06	0.82	0.93	1.51	1.11
Standard Deviation	1.03	0.91	0.97	1.23	1.05
Total Responses	32	32	32	32	32

Below you will see a list of names. Please choose a name that best fits your image of a Black Male leader.								
#	Question	Does not fit my image at all		Some what fits my image		Fits my image very well	Total Responses	Mean
1	Tyrone Jenkins	5	4	8	9	6	32	3.22
2	Aaron Johnson	2	6	4	10	10	32	3.63
3	James Williams	2	4	4	10	12	32	3.81
4	Marcus Mitchell	1	1	4	13	13	32	4.13
5	Ronald Jackson	1	1	9	15	6	32	3.75

Statistic	Tyrone Jenkins	Aaron Johnson	James Williams	Marcus Mitchell	Ronald Jackson
Min Value	1	1	1	1	1
Max Value	5	5	5	5	5
Mean	3.22	3.63	3.81	4.13	3.75
Variance	1.79	1.66	1.58	0.95	0.84
Standard Deviation	1.34	1.29	1.26	0.98	0.92
Total Responses	32	32	32	32	32

Below you will see a list of names. Please choose a name that best fits your image of a Black Female leader.								
#	Question	Does not fit my image at all		Somewhat fits my image		Fits my image very well	Total Responses	Mean
1	Rhonda Jones	2	1	4	15	10	32	3.94
2	Demetria Sanders	3	4	9	10	6	32	3.38
3	Jaleesa Reed	2	5	10	9	5	31	3.32
4	Jennifer Jacobs	1	8	6	9	7	31	3.42
5	Monique Taylor	3	3	4	10	12	32	3.78

Statistic	Rhonda Jones	Demetria Sanders	Jaleesa Reed	Jennifer Jacobs	Monique Taylor
Min Value	1	1	1	1	1
Max Value	5	5	5	5	5
Mean	3.94	3.38	3.32	3.42	3.78
Variance	1.16	1.47	1.29	1.45	1.72
Standard Deviation	1.08	1.21	1.14	1.2	1.31
Total Responses	32	32	31	31	32

Below you will see a list of names. Please choose a name that best fits your image of a White Female leader.								
#	Question	Does not fit my image at all		Somewhat fits my image		Fits my image very well	Total Responses	Mean
1	Nicole Clarke	0	2	6	10	14	32	4.13
2	Amber Philips	3	5	5	10	9	32	3.53
3	Carole Roth	1	2	4	16	9	32	3.94
4	Elizabeth Harris	0	0	4	13	15	32	4.34
5	Kelly Bradford	0	3	7	8	14	32	4.03

Statistic	Nicole Clarke	Amber Philips	Carole Roth	Elizabeth Harris	Kelly Bradford
Min Value	2	1	1	3	2
Max Value	5	5	5	5	5
Mean	4.13	3.53	3.94	4.34	4.03
Variance	0.89	1.74	0.96	0.49	1.06
Standard Deviation	0.94	1.32	0.98	0.7	1.03
Total Responses	32	32	32	32	32

Please rate the following names with how well they fit your image of a Hispanic Female leader.								
#	Question	Does not fit my image at all		Somew hat fits my image		Fits my image very well	Total Responses	Mean
1	Blanca Gonzalez	1	7	5	12	7	32	3.53
2	Eva Santiago	0	6	2	11	13	32	3.97
3	Maria Martinez	1	2	4	10	15	32	4.13
4	Nina Sanchez	0	4	3	15	10	32	3.97
5	Gloria Lopez	2	1	6	11	12	32	3.94

Statistic	Blanca Gonzalez	Eva Santiago	Maria Martinez	Nina Sanchez	Gloria Lopez
Min Value	1	2	1	2	1
Max Value	5	5	5	5	5
Mean	3.53	3.97	4.13	3.97	3.94
Variance	1.35	1.26	1.15	0.93	1.29
Standard Deviation	1.16	1.12	1.07	0.97	1.13
Total Responses	32	32	32	32	32

Please rate the following names with how well they fit your image of a Hispanic Male leader.								
#	Question	Does not fit my image at all		Some what fits my image		Fits my image very well	Total Responses	Mean
1	Jorge Balencia	1	6	6	11	8	32	3.59
2	Diego Santos	1	3	5	12	11	32	3.91
3	Carlos Garcia	1	3	3	13	12	32	4
4	Miguel Sanchez	1	4	4	12	11	32	3.88
5	Jose Demarco	0	4	4	14	10	32	3.94

Statistic	Jorge Balencia	Diego Santos	Carlos Garcia	Miguel Sanchez	Jose Demarco
Min Value	1	2	1	2	1
Max Value	5	5	5	5	5
Mean	3.53	3.97	4.13	3.97	3.94
Variance	1.35	1.26	1.15	0.93	1.29
Standard Deviation	1.16	1.12	1.07	0.97	1.13
Total Responses	32	32	32	32	32

Appendix D

Study 2 Survey

- Same consent form as in Appendix A

Instructions: Please review the following information about the leader and respond to the questions below. The questionnaires that follow are intended to gauge your response to the leader you read about. When responding please use your gut instinct to form your evaluations of the leader.

Please evaluate the leader below:

Carlos Garcia
89 Lake Road, Crick, NJ
88921
(555) 911-9009, cgarcia546@gmail.com

(Hispanic Male)

Elizabeth Harris
89 Lake Road, Crick, NJ
88921
(555) 911-9009, eharris546@gmail.com

(White Female)

Marcus Mitchell
89 Lake Road, Crick, NJ
88921
(555) 911-9009, mmitchell546@gmail.com

(Black Male)

Maria Martinez
89 Lake Road, Crick, NJ
88921
(555) 911-9009, mmartinez546@gmail.com

(Hispanic Female)

Ronda Jones
89 Lake Road, Crick, NJ
88921
(555) 911-9009, rjones546@gmail.com

(Black Female)

James Donovan
89 Lake Road, Crick, NJ
88921
(555) 911-9009, jdonovan546@gmail.com

(White Male)

WORK HISTORY WITHIN THE ORGANIZATION

Has worked with the company for 8 years, starting first as a front line employee before gradually shifting to a team leader then project manager. Receives positive comments from peers and subordinates. Has been a consistent and model employee for tenure.

SUMMARY OF QUALIFICATIONS

- Two years of experience working in the field of Project Management
- Highly skilled in managing performance of technical projects in accordance to set procedures
- Hands on experience in directing and supervising support resources for project activities
- In depth knowledge of ensuring utilization of project management standards
- Proficient in maintaining associated budgets
- Advanced user of MS Project and MS Office Applications

SKILLS

- Demonstrated ability to work with technical stakeholders
- Excellent oral and written communication skills
- Able to plan and manage resources effectively
- Excellent time management and organizational skills
- Familiarity with ICAM (Identity Control and Management) terminology

KEY ACHIEVEMENTS

- Streamlined accounting and reporting projects with schedules and general contract information in order to orchestrate smooth flow of operations
- Coordinated five small projects under one big project's umbrella in order to

bring about harmony in association

WORK EXPERIENCE

June 2010 –
Present ATSC
Junior Project Manager

- Provide project management support assigned projects
- Perform analysis of project requirements
- Support client meetings and checkpoints
- Document, review and assess operations
- Identify critical success factors
- Estimate, plan and schedule projects
- Develop project case and documentation
- Monitor performance metrics and project dashboards

CABs. **Instructions:** *Using the scale below, rate how well the following descriptors fit in with your image of* BLANK

1 2 Does not fit my image	3 Somewhat fits my image			4	5 Fits my image very well
Ambitious	1	2	3	4	5
Approachable	1	2	3	4	5
Articulate	1	2	3	4	5
Assertive	1	2	3	4	5
Bold	1	2	3	4	5
Conversational	1	2	3	4	5
Courageous	1	2	3	4	5
Decisive	1	2	3	4	5
Dependable	1	2	3	4	5
Has Dignity	1	2	3	4	5
Diligent	1	2	3	4	5
Disciplined Practitioner	1	2	3	4	5
Educated	1	2	3	4	5
Ethical	1	2	3	4	5
Extrovert	1	2	3	4	5
Fair	1	2	3	4	5
Family-Oriented	1	2	3	4	5
Honorable	1	2	3	4	5
Independent	1	2	3	4	5
Influential	1	2	3	4	5
Intelligent	1	2	3	4	5
Law-abiding	1	2	3	4	5
Likeable	1	2	3	4	5
Leader	1	2	3	4	5
Optimistic	1	2	3	4	5
Orderly	1	2	3	4	5
Persuasive	1	2	3	4	5
Powerful	1	2	3	4	5
Proper	1	2	3	4	5
Respectful	1	2	3	4	5
Responsible	1	2	3	4	5
Role model	1	2	3	4	5
Sharp	1	2	3	4	5
Strong	1	2	3	4	5
Successful	1	2	3	4	5
Thoughtful	1	2	3	4	5
Trustworthy	1	2	3	4	5
Value-oriented	1	2	3	4	5
Vigilant	1	2	3	4	5
Well Dressed	1	2	3	4	5

CAB Check. Instructions: Can you think of any potential descriptors (characteristics, attributes or behaviors) to describe BLANK?

Descriptor 1 _____
Descriptor 2_____
Descriptor 3 _____
Descriptor 4 _____
Descriptor 5 _____
Descriptor 6 _____
Descriptor 7 _____
Descriptor 8 _____
Descriptor 9 _____
Descriptor 10 _____

RecProm.

1	2	3	4	5	6	7
Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Strongly Likely

1. If you were BLANK supervisor, how likely would you be to recommend him for a promotion, if there was an available position open?	1	2	3	4	5	6	7

Peer.

1	2	3	4	5
Would not enjoy working with him	Slightly enjoy working with him	Uncertain if I would enjoy working with him	Strongly enjoy working with him	Very much enjoy working with him

1. If you were a peer (colleague/ same position) of BLANK, how much would you enjoy working with him?	1	2	3	4	5

EnjoySub.

1	2	3	4	5
Would not enjoy working for him	Slightly enjoy working for him	Uncertain if I would enjoy working for him	Strongly enjoy working for him	Very much enjoy working for him

1. If you were a subordinate (reported directly to him to complete your tasks) of BLANK, would you enjoy working for him?	1	2	3	4	5

Dependent Measures:

Ethical Leadership Scale. Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. Organizational Behavior and Human Decision Processes, 97, 117-134.

Instructions: In your opinion, do you believe that leader BANK:

1 Highly Unlikely	2 Unlikely	3 Somewhat Unlikely	4 Neither Likely Nor Unlikely	5 Somewhat Likely	6 Likely	7 Strongly Likely

1. Conducts his/her personal life in an ethical manner	1	2	3	4	5	6	7
2. Defines success not just by results but also by the way they are obtained	1	2	3	4	5	6	7
3. Listens to what employees have to say	1	2	3	4	5	6	7
4. Disciplines employees who violate ethical standards	1	2	3	4	5	6	7
5. Makes fair and balanced decisions	1	2	3	4	5	6	7
6. Can be trusted	1	2	3	4	5	6	7
7. Discusses business ethics or values with employees	1	2	3	4	5	6	7
8. Sets an example of how to do things the right way in terms of ethics	1	2	3	4	5	6	7
9. Has the best interest of employees in mind	1	2	3	4	5	6	7
10. When making decisions, asks "what is the right things to do?	1	2	3	4	5	6	7

General Leadership Impression. Cronshaw, S. F. & Lord, R. (1987) Effects of Categorization, Attribution, and Encoding Processes on Leadership Perceptions. *Journal of Applied Psychology, 72,* 97-106.

Instructions. How much did the leader you read about exhibit:

1 Not at all	2 Slightly	3 Moderately	4 Very	5 Extremely

a high degree of leadership ability	1	2	3	4	5
how willing are you to choose the leader as a formal leader	1	2	3	4	5
how typical the leader was of a leader	1	2	3	4	5
what extent the leader engaged in leader behavior	1	2	3	4	5
the degree to which the leader fit their image of a leader	1	2	3	4	5

Leader Effectiveness Scale: Bass, B.M., & Avolio, B.J. (1993). Transformational leadership: A response to critique: In: M.M. Chemers & R. Ayman (Eds.), Leadership: Theory and research perspectives and directions. San Diego, CA: Academic Press. *Instructions.* Based on the information you read about This Leader, please indicate the extent to that you believe he is effective as a leader, using the scale below:

1 Not at all	**2**	**3** Neutral	**4**	**5** Very much so

1. How effective is This Leader at achieving work objectives?	1	2	3	4	5

2. How effective is This Leader at achieving the goals and values of the organization?	1	2	3	4	5
3. How effective is This Leader in general?	1	2	3	4	5

Manipulation Checks:

1. What was the name of the leader whose resume you reviewed?

_____

Indicate the Leaders Gender		
2. Male	3. Female	
Indicate the Leaders Race		
4. White	5. Hispanic	6. Black

- Same demographics and debriefing as in Appendix A

Appendix E

Survey 3

- Same Consent form as in Appendix A.

Instructions. Take a minute to think of a 6 digit unique code. This code can be any combination of 6 digits (birthday, driver's license, phone number) as long as it is unique to you. Just numbers, no letters, spaces, hyphens or periods. Please write down the code where you can reference it often. We will be asking you for this code (as your participant ID) many times throughout the study. If this code is not correctly input, we will be unable to track your information and you may not get paid.

Please enter your six digit code here:___-___-___-___-___-___

The next part of the study will involve completing a word association task. This task will involve aligning various descriptors to a set of leaders. Please pay special attention to the instructions to complete this task properly. To begin, click on the link below and a new window will appear. This window will prompt you to download the task plugin which will enable the software necessary for this task.

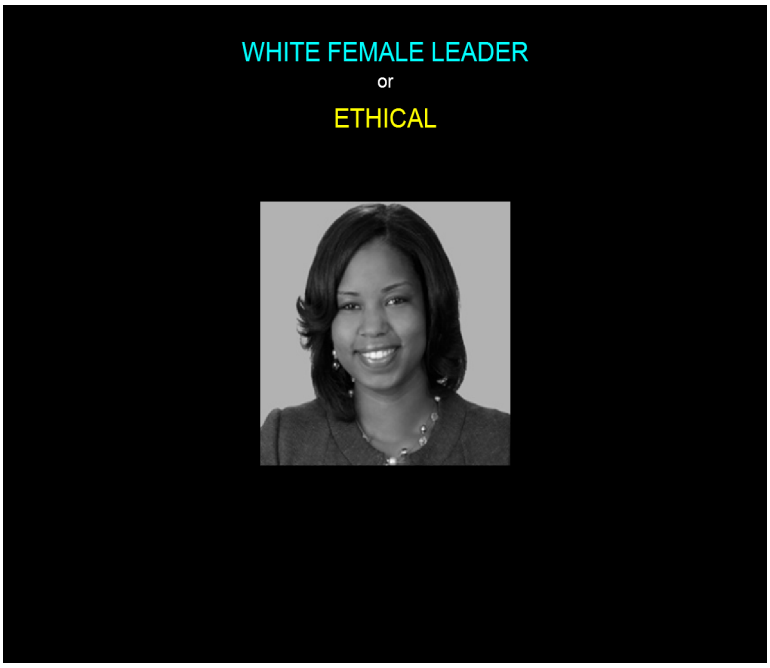
http://research.millisecond.com/rabiahm/BHIAT.web

When you complete this study it should route to back to this survey. If you encounter a problem please refresh this page and you should be able to pick up at the same point.

IAT. Instructions screenshot

Example Blocks

Black Female Leader



When rerouted back to Qualtrics:
Please re-enter your six digit code here:___-___-___-___-___-___

IAT Check:
Please identify which leader comparison you just evaluated:

1. Black & White Leader
2. Hispanic & White Leaders
3. Hispanic and Black Leaders

Did you encounter any issues with the previous task?

Instructions. The second half of this study involves answering questions about yourself and your beliefs. It will take approximately 10-20 minutes. Due to the sensitive nature of the following questions we want to remind and assure you that your data will be kept confidential.

Bias Measures Instructions: Please answer the following questions about yourself and your beliefs. Due to the sensitive nature of the following questions we want to remind and assure you that your data will be kept confidential instructions. Please indicate how descriptive each statement is of your beliefs by selecting the best option that corresponds to your response.

Intolerant Schema Measure (ISM). Aosved, A. C., Long, P. J., & Voller, E. K. (2009). Measuring sexism, racism, sexual prejudice, ageism, classism, and religious intolerance: The intolerant schema measure. *Journal of Applied Social Psychology*, *39*, 2321-2354.

Instructions: Please indicate how descriptive each statement is of your beliefs by circling the number that corresponds to your response. (1 = *strongly disagree* to 5 = *strongly agree*)

1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree

MHSL-7: Marriages between two lesbians should be legal. (R)	1	2	3	4	5
RIS-1: Christians are intolerant of people with other religious beliefs.	1	2	3	4	5
MEBS-1: People who stay on welfare have no desire to work.	1	2	3	4	5
MOFRS-5: I favor laws that permit racial minority persons to rent or purchase houses, even when the person offering the property for sale or rent does not wish to sell or rent to minorities. (R)	1	2	3	4	5
AWS-5: Women should worry less about their rights and more about becoming good wives and mothers.	1	2	3	4	5
FSA-5: Complex and interesting conversation cannot be expected from most old people.	1	2	3	4	5
MHSL-19: I don't mind companies using openly lesbian	1	2	3	4	5

celebrities to advertise their products. (R)					
RIS-2: Catholics have a “holier than thou” attitude.	1	2	3	4	5
MEBS-2: Welfare keeps the nation in debt.	1	2	3	4	5
MOFRS-4: Racial minorities have more influence on school desegregation plans than they ought to have.	1	2	3	4	5
AWS-8: It is ridiculous for a woman to run a locomotive and for a man to darn socks.	1	2	3	4	5
FSA-7: Most old people would be considered to have poor personal hygiene.	1	2	3	4	5
MHSL-21:Idon’t think it would negatively affect our relationship if I learned that one of my close relatives was a lesbian. (R)	1	2	3	4	5
RIS-3: Jewish people are deceitful and money-hungry.	1	2	3	4	5
MEBS-3: People who don’t make much money are generally unmotivated.	1	2	3	4	5
MOFRS-8: Racial minorities are getting too demanding in their push for equal rights.	1	2	3	4	5
AWS-9: The intellectual leadership of a community should be largely in the hands of men.	1	2	3	4	5
FSA-8: Most old people can be irritating because they tell the same stories over and over again.	1	2	3	4	5
MHSL-23: Lesbians should undergo therapy to change their sexual orientation.	1	2	3	4	5
RIS-4: Atheists and agnostics are more self-centered than people from other religious groups.	1	2	3	4	5
MEBS-5: Homeless people should get their acts together and become productive members of society.	1	2	3	4	5
MOFRS-9: It is a bad idea for racial minorities and Whites to marry one another.	1	2	3	4	5
AWS-13: In general, the father should have greater authority than the mother in bringing up the children.	1	2	3	4	5
FSA-13: Old people don’t really need to use our community sports facilities.	1	2	3	4	5
MHSG-3: I welcome new friends who are gay. (R)	1	2	3	4	5
RIS-5: Muslims are more treacherous than other groups of religious people.	1	2	3	4	5
MEBS-6: Too many of my tax dollars are spent to take care of those who are unwilling to take care of themselves.	1	2	3	4	5
MOFRS-10: Racial minorities should not push themselves where they are not wanted.	1	2	3	4	5
AWS-15: There are many jobs in which men should be given preference over women in being hired or promoted.	1	2	3	4	5
FSA-15: It is best that old people live where they won’t bother anyone.	1	2	3	4	5
MHSG-4: I would be sure to invite the same-sex partner of	1	2	3	4	5

my gay male friend to my party. (R)					
RIS-6: Wiccan and pagan people practice thinly veiled evil.	1	2	3	4	5
MEBS-7: If every individual would carry his/her own weight, there would be no poverty.	1	2	3	4	5
MOFRS-11: If a racial minority family with about the same income and education as I have moved in next door, I would mind a great deal.	1	2	3	4	5
NS-3: Women shouldn't push themselves where they are not wanted.	1	2	3	4	5
FSA-16: The company of most old people is quite enjoyable. (R)	1	2	3	4	5
MHSG-9: It's all right with me if I see two men holding hands.(R)	1	2	3	4	5
RIS-7: Many of the social problems in the U.S. today are due to non-Christian religious groups.	1	2	3	4	5
MEBS-8: There are more poor people than wealthy people in prisons because poor people commit more crimes.	1	2	3	4	5
MOFRS-12: It was wrong for the United States Supreme Court to outlaw segregation in its 1954 decision.	1	2	3	4	5
NS-6: Women's requests in terms of equality between the sexes are simply exaggerated.	1	2	3	4	5
FSA-20: I sometimes avoid eye contact with old people when I see them.	1	2	3	4	5
MHSG-18: Movies that approve of male homosexuality bother me.	1	2	3	4	5
RIS-8: The Hindu beliefs about reincarnation results in people not taking responsibility for their actions in this life since there is always the next life.	1	2	3	4	5
MEBS-9: Poor people are lazy.	1	2	3	4	5
MOFRS-13: Over the past few years, racial minorities have gotten more economically than they deserve.	1	2	3	4	5
NS-7: Over the past few years, women have gotten more from government than they deserve.	1	2	3	4	5
FSA-21: I don't like it when old people try to make conversation with me.	1	2	3	4	5
MHSG-22: Gay men want too many rights.	1	2	3	4	5
RIS-9: Despite what Buddhist people may say, Buddhism isn't really a religion, but more of a philosophy.	1	2	3	4	5
MEBS-13: Most poor people are in debt because they can't manage their money.	1	2	3	4	5
MOFRS-14: Over the past few years, the government and news media have shown more respect to racial minorities than they deserve.	1	2	3	4	5
NS-8: Universities are wrong to admit women in costly programs such as medicine, when in fact, a large number will leave their jobs after a few years to raise their children.	1	2	3	4	5

54. FSA-27: I personally would not want to spend much time with an old person	1	2	3	4	5

Note. MHSL/G=ModernHomophobiaScaleLesbian/Gay(Raja&Stokes, 1998); RIS = Religious Intolerance Scale (Items 1–5 originally developed by Godfrey et al., 2000, and included in M-GRISMS); MEBS = Modified Eco- nomic Beliefs Scale (Items 1–3 and Items 5–8 originally developed by Steven- son & Medler, 1995); MOFRS = Modern and Old-Fashioned Racism Scale (McConahay, 1986); AWS = Attitudes Toward Women Scale (Spence & Helmreich, 1972); FSA = Fraboni Scale of Ageism (Fraboni et al., 1990); NS = Neosexism Scale (Tougas et al., 1995). Subscale scores are calculated by averaging the 9 items (resulting in a range from 1 to 5, with higher scores indicating higher intolerance). A total score is calculated by averaging all 54 items. (R) = reverse-scored item.

Political Opinion survey. Fisher, D. G. & Sweeney, J. T. (1998). The Relationship between Political Attitudes and Moral Judgment: Examining the Validity of the Defining Issues Test. *Journal of Business Ethics, 17,* 905-916.

a. Some people feel that the federal government in Washington should see to it that every person has a job and a good standard of living. Others think that the government should just let each person get ahead on his own. And, of course, other people have opinions somewhere in between. Where would you place yourself on this scale?

1	**2**	**3**	**4**	**5**	**6**	**7**
Government sees to job and good standard of living						Government lets each person get ahead on his or her own

b. There is much concern about the rapid rise in medical and hospital costs. Some feel that there should be a government insurance plan which would cover all medical and hospital expenses. Others feel that medical expenses should be paid by individuals and through private insurance like Blue Cross. Where would you place yourself?

1	**2**	**3**	**4**	**5**	**6**	**7**
Government insurance plan						Private insurance plan

c. Some people feel that the federal government in Washington should make every effort to improve the social and economic position of African-Americans and other minority groups. Others feel that the government should not make any special effort to help

minorities because they should help themselves. Where would you place yourself on this scale?

1	2	3	4	5	6	7
Governmen t should help minority groups						Minority groups should help themselves

d. There has been much discussion concerning abortion during recent years. Which of the following opinions best agrees with your view?

1. Abortion should never be permitted.
2. Abortion should be permitted only if the life and health of the woman is in danger.
3. Abortion should be permitted if, due to personal reasons, the woman would have difficulty in caring for the child.
4. Abortion should never be forbidden, since one should not require a woman to have a child she doesn't want.

e. There has been a lot of talk about women's rights. Some people feel that women should have an equal role with men in running business, industry and government. Others feel that the women's place is in the home. Where would you place yourself on this scale?

f.

1	2	3	4	5	6	7
Women and men should have an equal role						Women's place is in the home

Concerning important political and social issues, where would you place yourself on the following scale?

1	2	3	4	5	6	7
Extremely Liberal						Extremely Conservative

- The same demographics and debriefing from Appendix A were completed.

Appendix F

Example Recruitment Letter:
Dear Professor X,

My name is Rabiah Muhammad and I am a doctoral candidate in the Industrial-Organizational Psychology program at the University of Maryland. I am contacting you to respectfully request your assistance in recruiting MBA students for my dissertation study. The study consists of a 20 to 30 minute questionnaire, where participants will provide their opinion on different types of leaders. This study involves reading a short story about a leader and responding to various questionnaires (see below for more information). Since you are teaching an MBA class, I was hoping that you might be willing to help me by either sending out the study link to your students through a class listserv or offering your students extra credit for completing it (some faculty have worked it into their class lecture). Any students who complete the study will also be entered into a raffle to win one of three gift certificates.

I would very much appreciate any help that you might be able to offer me. If you would like more information on the study or its purpose and are willing to offer my study to your students, please do not hesitate to contact me at rabiahm@umd.edu or (602) 435-3860.

Thank you for your consideration,

Rabiah Muhammad

Detailed dissertation information:

My dissertation research is on the role of context, gender and race when evaluating different types of leaders and how these evaluations may affect judgments of the leader's effectiveness and ethicality. This study will involve asking students to respond to a scenario about a leader whose characteristics and traits will vary depending on the condition. They will then rate this leader on variety of important variables such as liking and trust. There will be no deception used for this study and students will be thoroughly debriefed and be offered the chance to enter a raffle.

MBA students represent an interesting population to test because in general, they have previous work experience and have hopefully worked with a variety of different leaders but they also represent a consistent sample with similar backgrounds. I am aiming for around 350 participants.

Appendix G

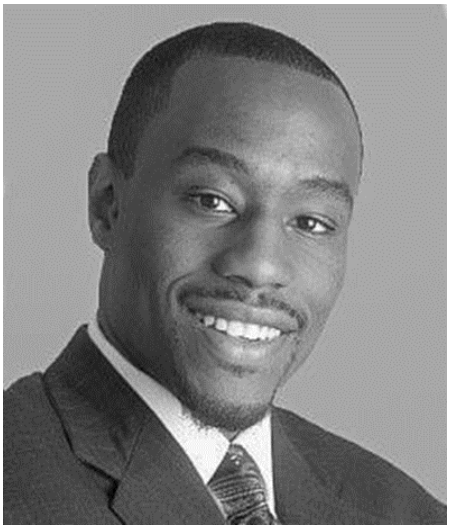
Original Vignette: Sy et al., (2010) connectionist leader paradigm which examined Asian and White leaders. This will be adapted in study 4 to test the context of the leader. The last line of the vignette will be deleted because it indicates potentially negative information which could have ethical ramifications:

> Tung-Sheng Wong (John Davis), a 31 year old Asian American (Caucasian American) male graduated in 2005 from the University of Arizona as a Marketing (Engineering) Major. He has been employed in the same US based organization for 7 years as a Sales Manager (Engineering Project Manager). His responsibilities include managing customer complaints, providing consultation regarding the company's services, and trouble shooting customer problems.

Study 4 Survey

- The same consent form from Appendix A were completed.

Vignette Manipulations Instructions: Please review the following information about the leader and respond to the questions below. The questionnaires that follow are intended to gauge your response to the leader you read about. When responding please use your "gut instinct" to form your evaluations of the leader.



BM.Market Condition. Marcus Mitchell, a 31-year-old African American male graduated in 2005 from the University of Arizona as a Marketing Major. He has been employed by the same Marketing firm for 7 years as a Sales Manager. His responsibilities include managing customer complaints, providing consultation regarding the company's services and troubleshooting customer problems. While he sometimes has problems with certain co-workers, he gets along well with others.

BM.Coach Condition. Marcus Mitchell, a 31-year-old African American male graduated in 2005 from the University of Arizona as a Physical Therapy Major. He has been employed in the same University for 7 years as a Basketball Coach. His responsibilities include managing players and player complaints, providing team strategies, and developing team cohesion and skills. While he sometimes has problems with certain co-workers, he gets along well with others.

BM.Nurse Condition. Marcus Mitchell, a 31-year-old African American male graduated in 2005 from the University of Arizona as a Nursing Major. He has been employed by the same Hospital for 7 years as a Nurse Manager. His responsibilities include managing teams of nurses, patient complaints, providing consultation regarding patient's health and troubleshooting nurse's issues. While he sometimes has problems with certain co-workers, he gets along well with others.

WF.Market Condition. Elizabeth Harris, a 31-year-old Caucasian American female graduated in 2005 from the University of Arizona as a Marketing Major. She has been employed by the same Marketing firm for 7 years as a Sales Manager. Her responsibilities include managing customer complaints, providing consultation regarding the company's services and troubleshooting customer problems. While she sometimes has problems with certain co-workers, she gets along well with others.

WF.Coach Condition. Elizabeth Harris, a 31-year-old Caucasian American female graduated in 2005 from the University of Arizona as a Physical Therapy Major. She has been employed in the same University for 7 years as a Basketball Coach. Her responsibilities include managing players and player complaints, providing team strategies, and developing team cohesion and skills. While she sometimes has problems with certain co-workers, she gets along well with others.

WF.Nurse Condition. Elizabeth Harris, a 31-year-old Caucasian American female graduated in 2005 from the University of Arizona as a Head Nurse. She has been employed by the same Hospital for 7 years as a Nurse Manager. Her responsibilities include managing teams of nurses, patient complaints, providing consultation regarding patient's health and troubleshooting nurse's issues. While she sometimes has problems with certain co-workers, she gets along well with others.

BF.Market Condition. Ronda Jones, a 31-year-old African American female graduated in 2005 from the University of Arizona as a Marketing Major. She has been employed by the same Marketing firm for 7 years as a Sales Manager. Her responsibilities include managing customer complaints, providing consultation regarding the company's services and troubleshooting customer problems. While she sometimes has problems with certain co-workers, she gets along well with others.

BF.Coach Condition. Ronda Jones, a 31-year-old African American female graduated in 2005 from the University of Arizona as a Physical Therapy Major. She has been employed in the same University for 7 years as a Basketball Coach. Her responsibilities include managing players and player complaints, providing team strategies, and developing team cohesion and skills. While she sometimes has problems with certain co-workers, she gets along well with others.

BF.Nurse Condition. Ronda Jones, a 31-year-old African American female graduated in 2005 from the University of Arizona as a Nursing Major. She has been employed by the same Hospital for 7 years as a Head Nurse. Her responsibilities include managing teams of nurses, patient complaints, providing consultation regarding patient's health and troubleshooting nurse's issues. While she sometimes has problems with certain co-workers, she gets along well with others.

WM.Market Condition. James Donovan, a 31-year-old Caucasian American male graduated in 2005 from the University of Arizona as a Marketing Major. He has been employed by the same marketing firm for 7 years as a Sales Manager. His responsibilities include managing customer complaints, providing consultation regarding the company's services and troubleshooting customer problems. While he sometimes has problems with certain co-workers, he gets along well with others.

WM.Coach Condition. James Donovan, a 31-year-old Caucasian American male graduated in 2005 from the University of Arizona as a Physical Therapy Major. He has been employed in the same University for 7 years as a Basketball Coach. His responsibilities include managing players and player complaints, providing team strategies, and developing team cohesion and skills. While he sometimes has problems with certain co-workers, he gets along well with others.

WM.Nurse Condition. James Donovan, a 31-year-old Caucasian American male graduated in 2005 from the University of Arizona as a Nursing Major. He has been employed by the same Hospital for 7 years as a Head Nurse. His responsibilities include managing teams of nurses, patient complaints, providing consultation regarding patient's health and troubleshooting nurse's issues. While he sometimes has problems with certain co-workers, he gets along well with others.

- The same leadership measures, dependent measures and debriefing that were used in Appendix D were completed.

Tables

Table 1. *Study 1, Full list of CABS*

Full list of CABS								
Accessible	Collective	Dignity	Fascinating	Independent	Motivated	Rare	Studious	Volatile
Accommodating	Comfortable	Diligent	Fashionable	Industrious	Musical	Rational	Stylish	Warm
Active	Comical	Diplomatic	Fearful	Influential	Noble	Reasonable	Suave	Wealthy
Activist	Committed	Direct	Feisty	Informal	Nurturing	Relaxed	Successful	Weary
Adaptable	Common sense	Dirty	Feminine	Innocent	Obnoxious	Reliable	Superficial	Well Dressed
Aggressive	Communal	Disciplined	Feminist	Innovative	Observant	Religious	Supportive	Well spoken
Agreeable	Communicative	Disciplined Practitioner	Fierce	Insistent	Older	Reserved	Sweet	Well-adjusted
Alert	Communicator	Dishonest	Flexible	Inspirational	Open-minded	Resilient	Sympathetic	Witty
Ambitious	Compassionate	Dishonorable	Fluent	Inspiring	Opinionated	Resourceful	Tactful	Wrong
Anxious	Competent	Diverse	Focused	Instrumental	Optimistic	Respectable	Talented	
Appreciative	Competitive	Dominating	Foolish	Integrity	Orderly	Respected	Talkative	
Approachable	Complicated	Dramatic	Forceful	Intelligent	Organized	Respectful	Task-Oriented	
Arrogant	Comprehensible	Dutiful	Forgiving	Intense	Outgoing	Responsible	Terrifying	
Articulate	Concerned	Earthy	Formidable	Intimidating	Overworked	Righteous	Thoughtful	
Artistic	Confident	Educated	Friendly	Intolerant	Partier	Risk taker	Tidy	
Assertive	Connected	Effective	Frugal	Introspective	Passionate	Role model	Tolerant	
Attentive	Conscientious	Efficient	Fun	Intuitive	Patient	Ruthless	Tough	
Attractive	Conservative	Egotistical	Funny	Inventive	Peacemaker	Safety-Conscious	Traditional	
Audacious	Considerate	Elected	Generous	Involved	Perceptive	Saintly	Transparent	
Authentic	Consistent	Elegant	Gentle	Irresponsible	Perfectionist	Samaritan	Trendsetter	
Authoritarian	Conversational	Emotional	Genuine	Joyful	Performer	Sarcastic	Trustworthy	
Aware	Cool	Empathetic	Glamorous	Judged	Persistent	Savvy	Uncompromising	
Belligerent	Cooperative	Empowering	Greedy	Judgmental	Persuadable	Scrupulous	Underachiever	

Full list of CABS Continued							
Boisterous	Crafty	Enigmatic	Happy	Law-abiding	Pliable	Sharp	Uneducated
Bold	Cranky	Entertaining	Hard worker	Lazy	Polished	Simple	Unfair
Boring	Creative	Enthusiastic	Hardworking	Liberal	Poor	Skilled	Unflappable
Brave	Crooked	Entitled	Harmonious	Likeable	Power-hungry	Sneaky	Unhealthy
Calm	Cultural	Esteemed	Harsh	Listener	Powerful	Sociable	Unique
Capable	Cultured	Ethical	Heartless	Listens	Practical	Socially-conscious	Unpredictable
Care free	Curious	Even keeled	Helpful	Low Income	Pragmatic	Sophisticated	Unprofessional
Caring	Daring	Exemplary	Hierarchal	Manager	Prepared	Special	Unscrupulous
Cautious	Deceitful	Experienced	Honest	Manly	Privileged	Spiritual	Unskilled
Challenging	Decisive	Extrovert	Honorable	Masculine	Professional	Stable	Unusual
Charismatic	Dedicated	Failure	Humble	Menial	Progressive	Steadfast	Uplifting
Charitable	Defiant	Fair	Humorous	Meticulous	Prompt	Stern	Vain
Charming	Deliberate	Faithful	Idealistic	Mindful	Proper	Strategic	Value-oriented
Cheerful	Dependable	Fake	Impolite	Modest	Proud	Stressed	Vibrant
Closed Minded	Detail Oriented	Family-Oriented	Imposter	Money oriented	Punctual	Strict	Vigilant
Cold	Determined	Famous	Impressive	Moody	Quick thinking	Strong	Visionary
Collaborative	Difficult	Fanatical	Improper	Moral	Quiet	Stubborn	Vivacious

Table 2. *Study 1, Family Resemblance and Cue Validity Scores for the CABs*

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Accessible	0.02	0.20	0.00	0.00	0.04	0.63	0.00	0.13	0.02	0.88	0.01	0.25	0.03	0.63
Accommodating	0.01	0.05	0.02	0.10	0.06	0.44	0.03	0.38	0.03	0.62	0.03	0.38	0.02	0.25
Active	0.04	0.13	0.04	0.13	0.09	0.35	0.05	0.32	0.06	0.68	0.05	0.29	0.07	0.39
Activist	0.05	0.30	0.03	0.20	0.00	0.00	0.03	0.38	0.03	0.63	0.01	0.13	0.04	0.50
Adaptable	0.02	0.14	0.00	0.00	0.02	0.18	0.03	0.64	0.01	0.37	0.01	0.09	0.02	0.27
Aggressive	0.16	0.30	0.07	0.14	0.13	0.31	0.03	0.14	0.12	0.86	0.14	0.51	0.10	0.35
Agreeable	0.05	0.25	0.01	0.04	0.03	0.21	0.04	0.42	0.03	0.58	0.03	0.32	0.03	0.26
Alert	0.04	0.20	0.00	0.00	0.02	0.15	0.06	0.60	0.02	0.40	0.01	0.05	0.04	0.35
Ambitious	0.14	0.29	0.06	0.12	0.07	0.20	0.06	0.28	0.09	0.72	0.08	0.33	0.10	0.39
Anxious	0.00	0.00	0.01	0.13	0.02	0.33	0.01	0.50	0.01	0.49	0.00	0.00	0.02	0.50
Appreciative	0.01	0.11	0.02	0.23	0.02	0.29	0.01	0.29	0.01	0.71	0.02	0.57	0.01	0.14
Approachable	0.07	0.12	0.09	0.17	0.05	0.12	0.13	0.52	0.07	0.48	0.08	0.29	0.05	0.19
Arrogant	0.03	0.12	0.02	0.08	0.04	0.26	0.04	0.47	0.03	0.53	0.03	0.32	0.02	0.21
Articulate	0.10	0.27	0.07	0.18	0.06	0.20	0.04	0.23	0.07	0.77	0.08	0.43	0.07	0.34
Artistic	0.01	0.04	0.00	0.00	0.00	0.00	0.10	0.95	0.00	0.05	0.00	0.00	0.01	0.05
Assertive	0.11	0.17	0.07	0.12	0.11	0.23	0.12	0.41	0.10	0.59	0.10	0.30	0.10	0.30
Attentive	0.03	0.11	0.02	0.08	0.01	0.03	0.10	0.72	0.02	0.28	0.01	0.03	0.04	0.24
Attractive	0.12	0.14	0.16	0.20	0.13	0.20	0.15	0.39	0.14	0.61	0.10	0.22	0.17	0.39
Audacious	0.01	0.09	0.01	0.09	0.04	0.56	0.01	0.22	0.02	0.77	0.01	0.11	0.03	0.67
Authentic	0.03	0.34	0.02	0.34	0.00	0.00	0.00	0.14	0.02	0.86	0.02	0.57	0.01	0.29
Authoritarian	0.01	0.05	0.04	0.23	0.07	0.53	0.01	0.12	0.04	0.87	0.04	0.47	0.04	0.41
Aware	0.01	0.07	0.01	0.07	0.02	0.27	0.03	0.55	0.01	0.45	0.02	0.27	0.01	0.18
Belligerent	0.05	0.21	0.07	0.28	0.06	0.30	0.01	0.09	0.06	0.91	0.05	0.39	0.07	0.52
Benevolent	0.00	0.00	0.02	0.06	0.03	0.14	0.11	0.79	0.02	0.21	0.02	0.14	0.01	0.07
Blunt	0.01	0.20	0.02	0.39	0.01	0.25	0.00	0.00	0.01	1.00	0.01	0.25	0.02	0.75
Boastful	0.00	0.00	0.01	0.13	0.02	0.33	0.01	0.50	0.01	0.49	0.00	0.00	0.02	0.50
Boisterous	0.06	0.61	0.00	0.00	0.02	0.22	0.00	0.00	0.03	1.02	0.01	0.11	0.04	0.89
Bold	0.05	0.12	0.07	0.18	0.11	0.35	0.05	0.28	0.08	0.72	0.08	0.38	0.08	0.35
Boring	0.00	0.00	0.02	0.26	0.01	0.17	0.01	0.50	0.01	0.49	0.01	0.17	0.01	0.33
Brave	0.13	0.29	0.07	0.17	0.05	0.14	0.06	0.29	0.08	0.72	0.09	0.40	0.07	0.31
Calm	0.08	0.21	0.05	0.13	0.09	0.29	0.05	0.29	0.07	0.71	0.07	0.32	0.08	0.39
Capable	0.03	0.06	0.07	0.19	0.08	0.26	0.08	0.42	0.06	0.58	0.04	0.18	0.08	0.39
Care free	0.01	0.08	0.01	0.08	0.02	0.30	0.02	0.50	0.01	0.50	0.03	0.50	0.00	0.00

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Cautious	0.05	0.22	0.02	0.11	0.04	0.23	0.04	0.36	0.04	0.64	0.04	0.36	0.03	0.27
Challenging	0.04	0.39	0.01	0.08	0.02	0.20	0.01	0.20	0.02	0.81	0.01	0.20	0.03	0.60
Charismatic	0.13	0.20	0.13	0.22	0.13	0.27	0.06	0.22	0.13	0.78	0.17	0.52	0.09	0.27
Charitable	0.03	0.14	0.02	0.09	0.06	0.41	0.02	0.29	0.03	0.70	0.03	0.29	0.04	0.41
Charming	0.04	0.23	0.02	0.14	0.02	0.18	0.03	0.35	0.03	0.65	0.04	0.41	0.02	0.24
Cheerful	0.03	0.10	0.03	0.14	0.05	0.26	0.05	0.43	0.04	0.56	0.02	0.17	0.05	0.39
Closed Minded	0.01	0.13	0.01	0.13	0.02	0.33	0.01	0.33	0.01	0.66	0.01	0.33	0.01	0.33
Cold	0.02	0.12	0.02	0.18	0.05	0.46	0.01	0.15	0.03	0.84	0.01	0.15	0.05	0.69
Collaborative	0.02	0.22	0.00	0.00	0.03	0.57	0.00	0.14	0.02	0.86	0.01	0.14	0.03	0.71
Collective	0.00	0.00	0.02	0.53	0.01	0.33	0.00	0.00	0.01	0.99	0.01	0.33	0.01	0.67
Comfortable	0.01	0.16	0.00	0.00	0.02	0.40	0.01	0.40	0.01	0.60	0.01	0.20	0.01	0.40
Comical	0.00	0.00	0.00	0.00	0.02	0.50	0.01	0.50	0.01	0.49	0.01	0.50	0.00	0.00
Committed	0.03	0.08	0.07	0.16	0.05	0.15	0.11	0.55	0.05	0.45	0.03	0.15	0.07	0.30
Common sense	0.00	0.00	0.01	0.11	0.03	0.57	0.01	0.29	0.01	0.71	0.01	0.14	0.02	0.57
Communal	0.03	0.40	0.02	0.40	0.00	0.00	0.00	0.00	0.02	1.01	0.02	0.50	0.02	0.50
Communicative	0.02	0.09	0.02	0.14	0.02	0.18	0.04	0.53	0.02	0.47	0.02	0.18	0.03	0.29
Communicator	0.01	0.06	0.01	0.06	0.03	0.31	0.03	0.54	0.02	0.46	0.01	0.15	0.02	0.31
Compassionate	0.09	0.15	0.11	0.20	0.07	0.16	0.12	0.41	0.09	0.59	0.07	0.21	0.12	0.38
Competent	0.08	0.25	0.02	0.05	0.07	0.25	0.06	0.38	0.06	0.63	0.05	0.31	0.05	0.31
Competitive	0.00	0.00	0.03	0.26	0.02	0.17	0.03	0.50	0.02	0.49	0.02	0.25	0.02	0.25
Complicated	0.02	0.22	0.00	0.00	0.03	0.57	0.00	0.14	0.02	0.86	0.03	0.71	0.01	0.14
Comprehensible	0.01	0.16	0.02	0.32	0.01	0.20	0.00	0.20	0.01	0.80	0.01	0.20	0.02	0.60
Concerned	0.02	0.12	0.02	0.12	0.02	0.23	0.03	0.46	0.02	0.54	0.03	0.38	0.01	0.15
Confident	0.21	0.32	0.11	0.17	0.12	0.24	0.05	0.16	0.15	0.85	0.13	0.38	0.16	0.46
Connected	0.06	0.33	0.06	0.33	0.02	0.12	0.00	0.06	0.04	0.94	0.04	0.41	0.05	0.53
Conscientious	0.03	0.14	0.01	0.05	0.02	0.12	0.05	0.65	0.02	0.35	0.02	0.18	0.02	0.18
Conservative	0.03	0.14	0.01	0.03	0.14	0.74	0.00	0.04	0.06	0.95	0.10	0.78	0.02	0.17
Considerate	0.05	0.22	0.02	0.07	0.05	0.27	0.04	0.36	0.04	0.64	0.05	0.45	0.02	0.18
Consistent	0.02	0.16	0.02	0.24	0.02	0.20	0.01	0.30	0.02	0.70	0.02	0.30	0.02	0.40
Conversational	0.02	0.18	0.02	0.18	0.01	0.11	0.02	0.44	0.01	0.56	0.03	0.56	0.00	0.00
Cool	0.02	0.13	0.02	0.20	0.02	0.25	0.02	0.33	0.02	0.66	0.02	0.25	0.03	0.42
Cooperative	0.02	0.06	0.03	0.11	0.04	0.18	0.08	0.61	0.03	0.39	0.03	0.18	0.03	0.21
Corrupt	0.01	0.13	0.00	0.00	0.02	0.33	0.01	0.50	0.01	0.50	0.01	0.33	0.01	0.17
Courageous	0.15	0.30	0.07	0.15	0.08	0.21	0.05	0.23	0.10	0.77	0.08	0.31	0.12	0.46
Courteous	0.07	0.24	0.02	0.09	0.02	0.08	0.06	0.50	0.04	0.50	0.03	0.23	0.04	0.27
Crafty	0.02	0.10	0.01	0.05	0.04	0.31	0.04	0.50	0.02	0.50	0.03	0.31	0.02	0.19
Cranky	0.01	0.11	0.01	0.11	0.02	0.29	0.01	0.43	0.01	0.57	0.01	0.29	0.01	0.29

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Creative	0.05	0.08	0.07	0.11	0.09	0.18	0.17	0.58	0.07	0.42	0.03	0.10	0.10	0.32
Crooked	0.01	0.16	0.00	0.00	0.02	0.40	0.01	0.40	0.01	0.60	0.01	0.20	0.01	0.40
Cultural	0.02	0.14	0.06	0.51	0.02	0.18	0.00	0.00	0.03	1.00	0.03	0.45	0.03	0.55
Cultured	0.00	0.00	0.10	0.51	0.04	0.26	0.01	0.11	0.05	0.89	0.08	0.74	0.02	0.16
Curious	0.01	0.16	0.00	0.00	0.02	0.40	0.01	0.40	0.01	0.60	0.01	0.20	0.01	0.40
Daring	0.02	0.12	0.01	0.06	0.07	0.62	0.01	0.15	0.03	0.84	0.02	0.31	0.04	0.54
Deceitful	0.03	0.11	0.02	0.07	0.04	0.23	0.06	0.55	0.03	0.45	0.02	0.18	0.03	0.27
Decisive	0.07	0.24	0.06	0.21	0.08	0.37	0.01	0.07	0.07	0.93	0.08	0.56	0.05	0.37
Dedicated	0.03	0.04	0.11	0.19	0.08	0.18	0.14	0.54	0.07	0.46	0.05	0.18	0.09	0.29
Defiant	0.00	0.00	0.02	0.47	0.02	0.40	0.00	0.00	0.01	0.99	0.02	0.60	0.01	0.40
Deliberate	0.01	0.39	0.00	0.00	0.01	0.50	0.00	0.00	0.01	1.01	0.01	0.50	0.01	0.50
Dependable	0.05	0.09	0.10	0.19	0.07	0.18	0.12	0.47	0.07	0.53	0.09	0.31	0.06	0.22
Detail Oriented	0.03	0.13	0.06	0.29	0.03	0.21	0.02	0.26	0.04	0.73	0.04	0.42	0.03	0.32
Determined	0.24	0.25	0.22	0.24	0.11	0.15	0.12	0.27	0.19	0.74	0.18	0.34	0.20	0.39
Difficult	0.00	0.00	0.00	0.00	0.02	1.00	0.00	0.00	0.01	0.99	0.01	1.00	0.00	0.00
Dignity	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.99	0.01	1.00	0.00	0.00
Diligent	0.03	0.09	0.05	0.17	0.04	0.18	0.07	0.50	0.04	0.50	0.04	0.29	0.03	0.21
Diplomatic	0.03	0.26	0.02	0.26	0.02	0.33	0.00	0.00	0.02	1.00	0.02	0.44	0.03	0.56
Direct	0.06	0.40	0.02	0.17	0.02	0.14	0.01	0.14	0.03	0.86	0.03	0.43	0.03	0.43
Dirty	0.01	0.10	0.00	0.00	0.01	0.13	0.03	0.75	0.01	0.25	0.01	0.13	0.01	0.13
Disciplined	0.01	0.04	0.02	0.11	0.03	0.19	0.06	0.62	0.02	0.38	0.02	0.19	0.02	0.19
Disciplined Practitioner	0.00	0.00	0.00	0.00	0.02	0.30	0.03	0.70	0.01	0.30	0.01	0.20	0.01	0.10
Dishonest	0.01	0.05	0.02	0.09	0.04	0.29	0.04	0.53	0.02	0.47	0.03	0.35	0.01	0.12
Dishonorable	0.00	0.00	0.00	0.00	0.03	0.67	0.01	0.33	0.01	0.66	0.02	0.67	0.00	0.00
Diverse	0.00	0.00	0.05	0.53	0.01	0.11	0.01	0.22	0.02	0.77	0.02	0.44	0.02	0.33
Dominating	0.07	0.23	0.02	0.06	0.13	0.57	0.01	0.07	0.07	0.93	0.08	0.50	0.07	0.43
Dramatic	0.00	0.00	0.01	0.10	0.02	0.25	0.02	0.63	0.01	0.37	0.01	0.13	0.01	0.25
Dutiful	0.02	0.05	0.00	0.00	0.04	0.16	0.12	0.78	0.02	0.22	0.02	0.13	0.02	0.09
Earthy	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.99	0.01	1.00	0.00	0.00
Educated	0.22	0.19	0.18	0.16	0.25	0.28	0.15	0.29	0.22	0.71	0.21	0.34	0.22	0.37
Effective	0.02	0.09	0.02	0.09	0.03	0.22	0.05	0.56	0.02	0.44	0.02	0.22	0.02	0.22
Efficient	0.02	0.07	0.03	0.14	0.05	0.27	0.05	0.45	0.03	0.54	0.03	0.23	0.04	0.32
Egotistical	0.01	0.04	0.01	0.04	0.03	0.20	0.07	0.70	0.02	0.30	0.02	0.20	0.01	0.10
Elected	0.00	0.00	0.00	0.00	0.01	0.17	0.02	0.83	0.00	0.16	0.01	0.17	0.00	0.00
Elegant	0.00	0.00	0.01	0.20	0.02	0.75	0.00	0.00	0.01	0.99	0.01	0.25	0.02	0.75
Emotional	0.03	0.14	0.04	0.18	0.02	0.09	0.05	0.50	0.03	0.50	0.03	0.23	0.03	0.27

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Empathetic	0.05	0.14	0.02	0.07	0.04	0.15	0.10	0.59	0.04	0.41	0.04	0.24	0.03	0.18
Empowering	0.02	0.16	0.02	0.16	0.05	0.60	0.00	0.00	0.03	1.00	0.02	0.40	0.03	0.60
Endearing	0.00	0.00	0.00	0.00	0.02	0.33	0.03	0.67	0.01	0.33	0.01	0.22	0.01	0.11
Energetic	0.06	0.17	0.04	0.12	0.08	0.30	0.05	0.33	0.06	0.67	0.05	0.30	0.07	0.36
Engaging	0.03	0.14	0.05	0.28	0.03	0.24	0.02	0.24	0.04	0.76	0.04	0.47	0.03	0.29
Enigmatic	0.00	0.00	0.00	0.00	0.02	1.00	0.00	0.00	0.01	0.99	0.01	1.00	0.00	0.00
Entertaining	0.01	0.09	0.00	0.00	0.02	0.33	0.02	0.56	0.01	0.44	0.01	0.22	0.01	0.22
Enthusiastic	0.06	0.19	0.02	0.05	0.09	0.38	0.04	0.31	0.05	0.69	0.06	0.38	0.05	0.31
Entitled	0.00	0.00	0.02	0.17	0.07	0.57	0.01	0.21	0.03	0.78	0.06	0.79	0.00	0.00
Esteemed	0.03	0.21	0.01	0.07	0.01	0.09	0.03	0.55	0.01	0.46	0.01	0.09	0.02	0.36
Ethical	0.03	0.16	0.04	0.27	0.04	0.33	0.01	0.13	0.04	0.86	0.05	0.67	0.02	0.20
Even keeled	0.03	0.26	0.01	0.09	0.01	0.11	0.02	0.44	0.01	0.56	0.01	0.11	0.02	0.44
Exemplary	0.02	0.10	0.00	0.00	0.01	0.06	0.06	0.81	0.01	0.19	0.01	0.06	0.01	0.13
Experienced	0.09	0.20	0.07	0.16	0.07	0.20	0.07	0.34	0.08	0.66	0.10	0.41	0.06	0.25
Extrovert	0.03	0.10	0.04	0.12	0.02	0.09	0.10	0.64	0.03	0.36	0.03	0.15	0.04	0.21
Failure	0.00	0.00	0.01	0.26	0.01	0.33	0.00	0.33	0.01	0.66	0.01	0.67	0.00	0.00
Fair	0.13	0.31	0.12	0.31	0.07	0.21	0.00	0.03	0.10	0.98	0.13	0.59	0.08	0.38
Faithful	0.02	0.16	0.02	0.24	0.03	0.40	0.00	0.10	0.02	0.90	0.03	0.50	0.02	0.40
Fake	0.01	0.09	0.01	0.09	0.02	0.22	0.02	0.56	0.01	0.44	0.02	0.33	0.01	0.11
Family-Oriented	0.11	0.17	0.22	0.36	0.08	0.16	0.06	0.21	0.14	0.79	0.14	0.41	0.13	0.38
Famous	0.01	0.05	0.02	0.10	0.02	0.13	0.05	0.69	0.01	0.31	0.02	0.25	0.01	0.06
Fanatical	0.02	0.39	0.00	0.00	0.01	0.25	0.00	0.25	0.01	0.76	0.01	0.25	0.01	0.50
Fascinating	0.00	0.00	0.00	0.00	0.01	0.50	0.00	0.50	0.00	0.49	0.01	0.50	0.00	0.00
Fashionable	0.05	0.52	0.01	0.09	0.01	0.11	0.00	0.11	0.02	0.90	0.02	0.33	0.03	0.56
Fearful	0.02	0.39	0.00	0.00	0.01	0.25	0.00	0.25	0.01	0.76	0.02	0.75	0.00	0.00
Feisty	0.03	0.26	0.03	0.26	0.02	0.25	0.00	0.08	0.03	0.92	0.02	0.25	0.04	0.67
Feminine	0.03	0.08	0.13	0.33	0.07	0.20	0.06	0.30	0.08	0.70	0.01	0.03	0.15	0.68
Feminist	0.01	0.07	0.02	0.20	0.07	0.67	0.00	0.00	0.03	0.99	0.01	0.08	0.06	0.92
Fierce	0.02	0.11	0.08	0.53	0.02	0.13	0.00	0.07	0.04	0.93	0.02	0.20	0.06	0.73
Flexible	0.06	0.19	0.02	0.08	0.03	0.14	0.07	0.52	0.04	0.49	0.01	0.07	0.07	0.41
Fluent	0.01	0.20	0.01	0.20	0.02	0.50	0.00	0.00	0.01	1.00	0.01	0.50	0.01	0.50
Focused	0.03	0.08	0.09	0.21	0.07	0.21	0.09	0.43	0.07	0.57	0.05	0.24	0.08	0.33
Foolish	0.01	0.16	0.01	0.16	0.02	0.40	0.00	0.20	0.01	0.80	0.02	0.60	0.01	0.20
Forceful	0.07	0.26	0.04	0.17	0.03	0.17	0.03	0.29	0.05	0.71	0.04	0.33	0.05	0.38
Forgiving	0.01	0.20	0.00	0.00	0.02	0.50	0.00	0.25	0.01	0.75	0.01	0.25	0.01	0.50
Formidable	0.01	0.26	0.00	0.00	0.02	0.67	0.00	0.00	0.01	1.00	0.01	0.33	0.01	0.67
Friendly	0.12	0.13	0.13	0.15	0.11	0.16	0.21	0.50	0.12	0.50	0.13	0.27	0.11	0.23

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Frugal	0.00	0.00	0.00	0.00	0.04	0.63	0.01	0.38	0.01	0.62	0.02	0.38	0.01	0.25
Fun	0.03	0.11	0.06	0.27	0.02	0.14	0.04	0.38	0.04	0.62	0.04	0.38	0.03	0.24
Funny	0.07	0.16	0.08	0.20	0.06	0.17	0.08	0.39	0.07	0.61	0.07	0.29	0.07	0.32
Generous	0.05	0.15	0.02	0.08	0.07	0.29	0.06	0.42	0.05	0.58	0.05	0.29	0.05	0.29
Gentle	0.02	0.10	0.01	0.05	0.02	0.20	0.04	0.60	0.02	0.40	0.01	0.07	0.03	0.33
Genuine	0.02	0.17	0.01	0.09	0.02	0.33	0.01	0.33	0.02	0.67	0.01	0.22	0.02	0.44
Glamorous	0.00	0.00	0.00	0.00	0.02	0.67	0.00	0.33	0.01	0.66	0.01	0.33	0.01	0.33
Greedy	0.02	0.09	0.01	0.05	0.06	0.41	0.03	0.41	0.03	0.59	0.03	0.35	0.02	0.24
Grounded	0.01	0.07	0.01	0.07	0.01	0.09	0.04	0.73	0.01	0.27	0.01	0.18	0.01	0.09
Gruff	0.00	0.00	0.00	0.00	0.01	0.20	0.02	0.80	0.00	0.20	0.01	0.20	0.00	0.00
Handy	0.01	0.26	0.01	0.26	0.01	0.33	0.00	0.00	0.01	1.00	0.01	0.67	0.01	0.33
Happy	0.04	0.18	0.04	0.18	0.03	0.18	0.04	0.36	0.04	0.64	0.04	0.36	0.03	0.27
Hard worker	0.03	0.06	0.11	0.23	0.02	0.06	0.14	0.58	0.06	0.42	0.07	0.26	0.04	0.16
Hardworking	0.11	0.10	0.24	0.22	0.15	0.16	0.25	0.46	0.16	0.54	0.19	0.31	0.14	0.23
Harmonious	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.99	0.01	1.00	0.00	0.00
Harsh	0.05	0.47	0.01	0.08	0.02	0.20	0.00	0.10	0.02	0.91	0.02	0.40	0.03	0.50
Heartless	0.01	0.26	0.01	0.26	0.01	0.33	0.00	0.00	0.01	1.00	0.01	0.67	0.01	0.33
Helpful	0.07	0.11	0.07	0.13	0.07	0.14	0.15	0.56	0.07	0.44	0.05	0.16	0.09	0.28
Hierarchal	0.01	0.26	0.01	0.26	0.01	0.33	0.00	0.00	0.01	1.00	0.01	0.67	0.01	0.33
Honest	0.17	0.24	0.15	0.22	0.16	0.29	0.05	0.15	0.16	0.85	0.12	0.32	0.20	0.53
Honorable	0.02	0.11	0.00	0.00	0.01	0.07	0.05	0.79	0.01	0.22	0.01	0.14	0.01	0.07
Humble	0.05	0.21	0.03	0.14	0.07	0.35	0.02	0.22	0.05	0.78	0.07	0.52	0.03	0.26
Humorous	0.01	0.04	0.04	0.21	0.04	0.26	0.04	0.42	0.03	0.57	0.05	0.47	0.01	0.11
Idealistic	0.01	0.11	0.00	0.00	0.02	0.29	0.02	0.57	0.01	0.43	0.01	0.29	0.01	0.14
Impolite	0.02	0.22	0.00	0.00	0.03	0.57	0.00	0.14	0.02	0.86	0.01	0.29	0.02	0.57
Imposter	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.99	0.01	1.00	0.00	0.00
Impressive	0.01	0.08	0.02	0.16	0.02	0.30	0.02	0.40	0.02	0.60	0.02	0.40	0.01	0.20
Improper	0.00	0.00	0.00	0.00	0.01	0.50	0.00	0.50	0.00	0.49	0.01	0.50	0.00	0.00
Independent	0.11	0.32	0.04	0.12	0.10	0.38	0.01	0.06	0.08	0.94	0.07	0.38	0.10	0.56
Industrious	0.02	0.07	0.02	0.07	0.02	0.08	0.09	0.75	0.02	0.25	0.02	0.17	0.01	0.08
Influential	0.08	0.27	0.07	0.21	0.07	0.27	0.02	0.13	0.07	0.87	0.06	0.37	0.08	0.50
Informal	0.00	0.00	0.01	0.39	0.01	0.50	0.00	0.00	0.01	0.99	0.01	1.00	0.00	0.00
Innocent	0.01	0.26	0.00	0.00	0.02	0.67	0.00	0.00	0.01	1.00	0.01	0.67	0.01	0.33
Innovative	0.03	0.10	0.05	0.19	0.08	0.40	0.03	0.24	0.05	0.76	0.04	0.32	0.06	0.44
Insistent	0.01	0.16	0.01	0.16	0.02	0.40	0.00	0.20	0.01	0.80	0.02	0.60	0.01	0.20
Inspirational	0.03	0.18	0.04	0.31	0.03	0.31	0.00	0.08	0.03	0.92	0.03	0.46	0.03	0.46
Inspiring	0.05	0.25	0.02	0.12	0.05	0.32	0.02	0.21	0.04	0.79	0.01	0.11	0.07	0.68

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Instrumental	0.00	0.00	0.00	0.00	0.01	0.17	0.02	0.83	0.00	0.16	0.01	0.17	0.00	0.00
Integrity	0.01	0.10	0.02	0.30	0.02	0.38	0.00	0.13	0.02	0.87	0.02	0.50	0.02	0.38
Intelligent	0.43	0.22	0.36	0.19	0.45	0.27	0.25	0.25	0.41	0.75	0.36	0.33	0.46	0.42
Intense	0.03	0.30	0.02	0.20	0.00	0.00	0.01	0.38	0.01	0.63	0.01	0.25	0.02	0.38
Intimidating	0.02	0.22	0.00	0.00	0.03	0.57	0.00	0.14	0.02	0.86	0.02	0.57	0.01	0.29
Intolerant	0.01	0.16	0.02	0.47	0.00	0.00	0.00	0.20	0.01	0.80	0.01	0.20	0.02	0.60
Introspective	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Intuitive	0.04	0.25	0.01	0.05	0.03	0.25	0.03	0.38	0.03	0.63	0.02	0.19	0.04	0.44
Inventive	0.00	0.00	0.00	0.00	0.02	0.33	0.02	0.67	0.01	0.33	0.01	0.17	0.01	0.17
Involved	0.02	0.05	0.04	0.13	0.02	0.06	0.11	0.71	0.02	0.29	0.01	0.06	0.04	0.23
Irresponsible	0.01	0.16	0.01	0.16	0.00	0.00	0.01	0.60	0.01	0.40	0.01	0.20	0.01	0.20
Joyful	0.01	0.09	0.01	0.09	0.00	0.00	0.03	0.78	0.01	0.22	0.01	0.11	0.01	0.11
Judged	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	1.00
Judgmental	0.02	0.39	0.00	0.00	0.01	0.25	0.00	0.25	0.01	0.76	0.01	0.50	0.01	0.25
Just	0.03	0.39	0.01	0.13	0.02	0.33	0.00	0.00	0.02	1.01	0.01	0.17	0.03	0.83
Kind	0.17	0.17	0.23	0.23	0.24	0.29	0.12	0.24	0.21	0.76	0.19	0.35	0.23	0.42
Knowledgeable	0.08	0.11	0.14	0.19	0.11	0.19	0.16	0.45	0.11	0.55	0.10	0.26	0.12	0.30
Law-abiding	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Lazy	0.01	0.04	0.02	0.13	0.02	0.17	0.05	0.61	0.02	0.39	0.03	0.28	0.01	0.11
Liberal	0.03	0.11	0.07	0.33	0.02	0.14	0.03	0.32	0.04	0.68	0.03	0.23	0.05	0.45
Likeable	0.05	0.11	0.05	0.11	0.06	0.16	0.12	0.56	0.05	0.44	0.07	0.28	0.04	0.16
Listener	0.06	0.19	0.11	0.36	0.04	0.17	0.02	0.14	0.07	0.86	0.05	0.34	0.08	0.52
Listens	0.02	0.20	0.00	0.00	0.02	0.38	0.01	0.38	0.01	0.63	0.02	0.50	0.01	0.13
Low Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Manager	0.03	0.39	0.01	0.13	0.00	0.00	0.01	0.33	0.01	0.68	0.01	0.33	0.01	0.33
Manly	0.01	0.09	0.06	0.62	0.01	0.11	0.00	0.00	0.02	0.99	0.05	1.00	0.00	0.00
Masculine	0.02	0.11	0.07	0.48	0.02	0.13	0.01	0.13	0.04	0.86	0.05	0.67	0.02	0.20
Menial	0.00	0.00	0.01	0.39	0.00	0.00	0.00	0.50	0.00	0.49	0.01	0.50	0.00	0.00
Meticulous	0.00	0.00	0.00	0.00	0.01	0.10	0.04	0.90	0.00	0.10	0.01	0.10	0.00	0.00
Mindful	0.01	0.05	0.03	0.20	0.02	0.13	0.04	0.56	0.02	0.43	0.01	0.06	0.03	0.38
Modest	0.02	0.17	0.00	0.00	0.03	0.44	0.01	0.33	0.02	0.67	0.01	0.22	0.02	0.44
Money oriented	0.00	0.00	0.00	0.00	0.02	0.25	0.03	0.75	0.01	0.25	0.01	0.13	0.01	0.13
Moody	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Moral	0.04	0.21	0.02	0.12	0.07	0.42	0.01	0.16	0.04	0.84	0.03	0.26	0.06	0.58
Motivated	0.06	0.13	0.07	0.15	0.12	0.35	0.06	0.30	0.08	0.70	0.08	0.35	0.08	0.35
Musical	0.00	0.00	0.02	0.20	0.00	0.00	0.04	0.75	0.01	0.25	0.01	0.08	0.01	0.17
Noble	0.01	0.10	0.00	0.00	0.02	0.25	0.02	0.63	0.01	0.38	0.01	0.25	0.01	0.13

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Nurturing	0.04	0.14	0.02	0.05	0.01	0.03	0.10	0.72	0.02	0.28	0.01	0.03	0.04	0.24
Obnoxious	0.01	0.06	0.04	0.31	0.02	0.23	0.02	0.31	0.02	0.69	0.02	0.23	0.03	0.46
Observant	0.00	0.00	0.01	0.11	0.01	0.14	0.02	0.71	0.01	0.28	0.01	0.14	0.01	0.14
Older	0.03	0.12	0.00	0.00	0.12	0.75	0.01	0.10	0.05	0.90	0.05	0.50	0.04	0.40
Open-minded	0.04	0.17	0.05	0.21	0.07	0.39	0.01	0.13	0.05	0.87	0.04	0.30	0.07	0.57
Opinionated	0.04	0.26	0.04	0.26	0.03	0.27	0.00	0.07	0.04	0.93	0.03	0.40	0.04	0.53
Optimistic	0.05	0.25	0.02	0.12	0.04	0.26	0.02	0.26	0.04	0.74	0.02	0.21	0.05	0.53
Orderly	0.02	0.14	0.00	0.00	0.01	0.09	0.04	0.73	0.01	0.28	0.01	0.09	0.01	0.18
Organized	0.08	0.14	0.11	0.20	0.11	0.26	0.08	0.32	0.10	0.68	0.08	0.26	0.12	0.42
Outgoing	0.09	0.25	0.09	0.25	0.00	0.00	0.06	0.37	0.06	0.63	0.06	0.31	0.06	0.31
Overworked	0.00	0.00	0.00	0.00	0.01	0.14	0.03	0.86	0.00	0.14	0.01	0.14	0.00	0.00
Partier	0.00	0.00	0.01	0.26	0.00	0.00	0.01	0.67	0.00	0.33	0.00	0.00	0.01	0.33
Passionate	0.07	0.12	0.15	0.29	0.10	0.23	0.07	0.26	0.11	0.73	0.09	0.30	0.13	0.43
Patient	0.07	0.25	0.02	0.09	0.03	0.16	0.05	0.40	0.04	0.60	0.05	0.36	0.03	0.24
Peacemaker	0.00	0.00	0.02	0.32	0.02	0.60	0.00	0.00	0.01	0.99	0.02	0.80	0.01	0.20
Perceptive	0.01	0.11	0.00	0.00	0.02	0.29	0.02	0.57	0.01	0.43	0.01	0.14	0.01	0.29
Perfectionist	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Performer	0.00	0.00	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.99	0.01	1.00	0.00	0.00
Persistent	0.03	0.09	0.02	0.06	0.05	0.22	0.08	0.59	0.03	0.41	0.01	0.07	0.05	0.33
Persuadable	0.00	0.00	0.00	0.00	0.02	0.50	0.01	0.50	0.01	0.49	0.01	0.25	0.01	0.25
Persuasive	0.04	0.26	0.01	0.05	0.01	0.07	0.04	0.53	0.02	0.47	0.03	0.33	0.01	0.13
Philanthropic	0.02	0.26	0.01	0.13	0.01	0.17	0.01	0.33	0.01	0.67	0.01	0.17	0.02	0.50
Playful	0.00	0.00	0.01	0.20	0.00	0.00	0.01	0.75	0.00	0.25	0.01	0.25	0.00	0.00
Pliable	0.00	0.00	0.01	0.20	0.00	0.00	0.01	0.75	0.00	0.25	0.00	0.00	0.01	0.25
Polished	0.03	0.18	0.02	0.12	0.03	0.31	0.02	0.31	0.02	0.69	0.03	0.38	0.02	0.31
Poor	0.00	0.00	0.01	0.06	0.00	0.00	0.06	0.93	0.00	0.07	0.01	0.07	0.00	0.00
Power-hungry	0.01	0.20	0.00	0.00	0.02	0.75	0.00	0.00	0.01	1.00	0.01	0.25	0.02	0.75
Powerful	0.12	0.20	0.11	0.19	0.17	0.38	0.04	0.14	0.13	0.86	0.14	0.45	0.13	0.41
Practical	0.03	0.20	0.04	0.25	0.04	0.31	0.01	0.13	0.04	0.87	0.02	0.19	0.06	0.69
Pragmatic	0.01	0.39	0.01	0.39	0.00	0.00	0.00	0.00	0.01	1.01	0.01	0.50	0.01	0.50
Prepared	0.01	0.13	0.00	0.00	0.02	0.33	0.01	0.50	0.01	0.50	0.01	0.17	0.01	0.33
Privileged	0.00	0.00	0.01	0.07	0.07	0.75	0.01	0.17	0.03	0.82	0.04	0.58	0.02	0.25
Professional	0.05	0.19	0.02	0.06	0.05	0.24	0.05	0.44	0.04	0.56	0.04	0.32	0.03	0.24
Progressive	0.04	0.25	0.07	0.40	0.02	0.13	0.00	0.06	0.04	0.94	0.03	0.38	0.05	0.56
Prompt	0.02	0.11	0.01	0.06	0.02	0.14	0.04	0.64	0.01	0.36	0.02	0.29	0.01	0.07
Proper	0.01	0.08	0.01	0.08	0.02	0.20	0.03	0.60	0.01	0.40	0.01	0.10	0.02	0.30
Proud	0.11	0.24	0.15	0.33	0.07	0.20	0.02	0.11	0.11	0.89	0.13	0.51	0.09	0.38

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Punctual	0.03	0.18	0.02	0.09	0.02	0.17	0.04	0.50	0.02	0.50	0.02	0.22	0.03	0.28
Quick thinking	0.01	0.03	0.02	0.06	0.05	0.23	0.08	0.65	0.02	0.34	0.03	0.19	0.02	0.15
Quiet	0.02	0.14	0.01	0.07	0.03	0.36	0.02	0.36	0.02	0.64	0.02	0.27	0.02	0.36
Rare	0.01	0.20	0.01	0.20	0.01	0.25	0.00	0.25	0.01	0.75	0.01	0.25	0.01	0.50
Rational	0.01	0.16	0.01	0.16	0.02	0.40	0.00	0.20	0.01	0.80	0.01	0.20	0.02	0.60
Reasonable	0.04	0.33	0.02	0.13	0.02	0.25	0.01	0.17	0.03	0.84	0.03	0.42	0.03	0.42
Relaxed	0.02	0.11	0.03	0.21	0.03	0.27	0.02	0.33	0.03	0.66	0.02	0.20	0.04	0.47
Reliable	0.03	0.11	0.02	0.06	0.02	0.07	0.10	0.71	0.02	0.29	0.02	0.14	0.02	0.14
Religious	0.08	0.21	0.15	0.39	0.07	0.24	0.00	0.03	0.10	0.97	0.11	0.53	0.09	0.45
Reserved	0.03	0.26	0.02	0.20	0.00	0.00	0.02	0.42	0.02	0.59	0.02	0.25	0.02	0.33
Resilient	0.04	0.33	0.02	0.13	0.00	0.00	0.02	0.42	0.02	0.59	0.02	0.25	0.02	0.33
Resourceful	0.02	0.11	0.02	0.11	0.01	0.07	0.05	0.67	0.01	0.33	0.02	0.20	0.01	0.13
Respectable	0.03	0.10	0.05	0.19	0.02	0.12	0.06	0.52	0.03	0.48	0.02	0.16	0.04	0.32
Respected	0.04	0.17	0.04	0.17	0.06	0.29	0.03	0.29	0.05	0.71	0.05	0.38	0.04	0.33
Respectful	0.07	0.22	0.04	0.14	0.06	0.24	0.04	0.31	0.05	0.69	0.05	0.34	0.05	0.34
Responsible	0.03	0.10	0.02	0.05	0.05	0.19	0.10	0.63	0.03	0.38	0.03	0.19	0.03	0.19
Righteous	0.01	0.39	0.01	0.39	0.00	0.00	0.00	0.00	0.01	1.01	0.00	0.00	0.01	1.00
Risk taker	0.03	0.22	0.02	0.14	0.02	0.18	0.02	0.36	0.02	0.64	0.02	0.27	0.02	0.36
Role model	0.06	0.29	0.02	0.08	0.02	0.11	0.04	0.42	0.03	0.58	0.02	0.16	0.04	0.42
Ruthless	0.01	0.09	0.01	0.09	0.04	0.56	0.01	0.22	0.02	0.77	0.01	0.11	0.03	0.67
Safety-Conscious	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Saintly	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Samaritan	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Sarcastic	0.00	0.00	0.00	0.00	0.01	0.50	0.00	0.50	0.00	0.49	0.00	0.00	0.01	0.50
Savvy	0.00	0.00	0.02	0.53	0.01	0.33	0.00	0.00	0.01	0.99	0.01	0.67	0.01	0.33
Scrupulous	0.02	0.22	0.00	0.00	0.01	0.14	0.02	0.57	0.01	0.43	0.01	0.14	0.01	0.29
Selfish	0.03	0.15	0.00	0.00	0.04	0.31	0.04	0.50	0.02	0.50	0.04	0.44	0.01	0.06
Sensitive	0.05	0.14	0.02	0.07	0.03	0.11	0.11	0.63	0.04	0.37	0.02	0.11	0.05	0.26
Serious	0.02	0.08	0.02	0.12	0.05	0.30	0.04	0.45	0.03	0.55	0.04	0.35	0.02	0.20
Sharp	0.00	0.00	0.07	0.16	0.02	0.05	0.14	0.74	0.03	0.25	0.02	0.08	0.04	0.18
Simple	0.02	0.23	0.02	0.23	0.01	0.14	0.01	0.29	0.01	0.72	0.00	0.00	0.03	0.71
Skilled	0.02	0.04	0.04	0.10	0.07	0.21	0.11	0.61	0.04	0.39	0.02	0.11	0.06	0.29
Sneaky	0.01	0.06	0.00	0.00	0.04	0.36	0.04	0.57	0.02	0.43	0.02	0.21	0.02	0.21
Sociable	0.07	0.17	0.01	0.02	0.02	0.08	0.12	0.68	0.03	0.33	0.03	0.16	0.03	0.16
Socially-conscious	0.02	0.22	0.00	0.00	0.01	0.14	0.02	0.57	0.01	0.43	0.00	0.00	0.02	0.43

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Sophisticated	0.01	0.39	0.00	0.00	0.01	0.50	0.00	0.00	0.01	1.01	0.00	0.00	0.01	1.00
Special	0.01	0.39	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.51	0.00	0.00	0.01	0.50
Spiritual	0.02	0.39	0.01	0.20	0.00	0.00	0.00	0.25	0.01	0.76	0.02	0.75	0.00	0.00
Stable	0.03	0.29	0.00	0.00	0.00	0.00	0.02	0.63	0.01	0.38	0.00	0.00	0.02	0.38
Steadfast	0.00	0.00	0.00	0.00	0.02	0.75	0.00	0.25	0.01	0.74	0.01	0.50	0.01	0.25
Stern	0.02	0.07	0.07	0.30	0.07	0.38	0.02	0.17	0.05	0.83	0.05	0.38	0.06	0.46
Strategic	0.00	0.00	0.02	0.23	0.02	0.43	0.01	0.29	0.01	0.71	0.00	0.00	0.03	0.71
Stressed	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Strict	0.05	0.18	0.04	0.15	0.11	0.48	0.01	0.11	0.07	0.89	0.05	0.37	0.08	0.52
Strong	0.47	0.27	0.37	0.22	0.35	0.24	0.15	0.18	0.40	0.82	0.44	0.45	0.36	0.37
Stubborn	0.05	0.18	0.04	0.15	0.07	0.35	0.03	0.23	0.05	0.77	0.07	0.46	0.04	0.31
Studious	0.01	0.03	0.02	0.06	0.02	0.12	0.09	0.76	0.02	0.24	0.01	0.04	0.03	0.20
Stylish	0.01	0.13	0.02	0.26	0.02	0.33	0.00	0.17	0.01	0.83	0.01	0.17	0.02	0.67
Suave	0.02	0.13	0.02	0.20	0.00	0.00	0.03	0.58	0.01	0.42	0.02	0.33	0.01	0.08
Successful	0.13	0.32	0.07	0.19	0.03	0.11	0.04	0.24	0.08	0.76	0.07	0.35	0.08	0.41
Superficial	0.00	0.00	0.02	0.30	0.00	0.00	0.02	0.63	0.01	0.37	0.00	0.00	0.02	0.38
Supportive	0.02	0.08	0.04	0.19	0.06	0.33	0.03	0.33	0.04	0.66	0.03	0.24	0.05	0.43
Sweet	0.00	0.00	0.02	0.06	0.02	0.08	0.10	0.84	0.01	0.16	0.01	0.08	0.01	0.08
Sympathetic	0.05	0.14	0.02	0.07	0.05	0.17	0.10	0.57	0.04	0.43	0.04	0.20	0.04	0.23
Tactful	0.01	0.06	0.00	0.00	0.03	0.29	0.04	0.64	0.01	0.36	0.00	0.00	0.03	0.36
Talented	0.03	0.08	0.02	0.06	0.03	0.10	0.15	0.74	0.03	0.26	0.02	0.07	0.04	0.19
Talkative	0.05	0.12	0.11	0.26	0.03	0.10	0.09	0.44	0.06	0.56	0.05	0.24	0.07	0.32
Task-Oriented	0.01	0.09	0.01	0.09	0.03	0.44	0.01	0.33	0.02	0.66	0.02	0.44	0.01	0.22
Terrifying	0.02	0.52	0.00	0.00	0.01	0.33	0.00	0.00	0.01	1.01	0.00	0.00	0.02	1.00
Thoughtful	0.06	0.15	0.08	0.21	0.07	0.21	0.06	0.34	0.07	0.66	0.08	0.37	0.06	0.29
Tidy	0.01	0.08	0.00	0.00	0.01	0.10	0.04	0.80	0.01	0.20	0.00	0.00	0.01	0.20
Tolerant	0.04	0.31	0.04	0.31	0.02	0.23	0.00	0.00	0.04	1.00	0.04	0.62	0.03	0.38
Tough	0.10	0.21	0.10	0.21	0.11	0.31	0.03	0.16	0.10	0.84	0.07	0.27	0.14	0.58
Traditional	0.00	0.00	0.04	0.57	0.02	0.29	0.00	0.00	0.02	0.99	0.03	0.71	0.01	0.29
Transparent	0.03	0.39	0.00	0.00	0.02	0.33	0.00	0.17	0.01	0.84	0.00	0.00	0.03	0.83
Trendsetter	0.02	0.14	0.00	0.00	0.01	0.09	0.04	0.73	0.01	0.28	0.01	0.09	0.01	0.18
Trustworthy	0.11	0.19	0.11	0.19	0.05	0.11	0.11	0.42	0.09	0.58	0.08	0.25	0.10	0.33
Uncompromising	0.01	0.10	0.01	0.10	0.02	0.38	0.01	0.38	0.01	0.62	0.02	0.38	0.01	0.25
Underachiever	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.01	0.20
Underdog	0.00	0.00	0.01	0.39	0.01	0.50	0.00	0.00	0.01	0.99	0.01	0.50	0.01	0.50
Understanding	0.13	0.21	0.14	0.24	0.11	0.23	0.06	0.21	0.12	0.79	0.09	0.30	0.15	0.49
Uneducated	0.02	0.11	0.02	0.11	0.00	0.00	0.05	0.73	0.01	0.27	0.01	0.07	0.02	0.20

CABs	FR-Black	Black-CV	FR-Hisp	Hisp-CV	FR-White	White-CV	FR-NonLead	Nonlead-CV	FR-Leader	Leader-CV	FR-Male	Male-CV	FR-Fem	Fem-CV
Unfair	0.01	0.16	0.00	0.00	0.02	0.60	0.00	0.20	0.01	0.80	0.01	0.40	0.01	0.40
Unflappable	0.01	0.39	0.00	0.00	0.01	0.50	0.00	0.00	0.01	1.01	0.01	0.50	0.01	0.50
Unhealthy	0.02	0.39	0.01	0.20	0.00	0.00	0.00	0.25	0.01	0.76	0.01	0.25	0.01	0.50
Unique	0.04	0.33	0.01	0.07	0.01	0.08	0.02	0.42	0.02	0.59	0.01	0.08	0.03	0.50
Unpredictable	0.01	0.16	0.00	0.00	0.01	0.20	0.01	0.60	0.01	0.40	0.00	0.00	0.01	0.40
Unprofessional	0.00	0.00	0.01	0.79	0.00	0.00	0.00	0.00	0.00	0.99	0.01	1.00	0.00	0.00
Unscrupulous	0.00	0.00	0.00	0.00	0.02	1.00	0.00	0.00	0.01	0.99	0.01	1.00	0.00	0.00
Unskilled	0.02	0.39	0.00	0.00	0.02	0.50	0.00	0.00	0.01	1.01	0.01	0.50	0.01	0.50
Unusual	0.02	0.20	0.02	0.20	0.00	0.00	0.02	0.50	0.01	0.50	0.01	0.13	0.02	0.38
Uplifting	0.01	0.20	0.00	0.00	0.00	0.00	0.01	0.75	0.00	0.25	0.00	0.00	0.01	0.25
Vain	0.00	0.00	0.00	0.00	0.01	0.33	0.01	0.67	0.00	0.33	0.01	0.33	0.00	0.00
Value-oriented	0.00	0.00	0.02	0.59	0.01	0.25	0.00	0.00	0.01	0.99	0.02	0.75	0.01	0.25
Vibrant	0.00	0.00	0.02	0.16	0.00	0.00	0.04	0.80	0.01	0.20	0.01	0.10	0.01	0.10
Vigilant	0.01	0.26	0.01	0.26	0.00	0.00	0.00	0.33	0.01	0.67	0.00	0.00	0.01	0.67
Visionary	0.05	0.36	0.02	0.12	0.02	0.15	0.01	0.23	0.03	0.78	0.02	0.31	0.03	0.46
Vivacious	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Volatile	0.01	0.13	0.01	0.13	0.01	0.17	0.01	0.50	0.01	0.50	0.01	0.17	0.01	0.33
Warm	0.10	0.18	0.07	0.14	0.07	0.15	0.12	0.45	0.08	0.55	0.08	0.26	0.08	0.28
Wealthy	0.05	0.10	0.03	0.07	0.17	0.44	0.08	0.35	0.08	0.64	0.12	0.46	0.05	0.19
Weary	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Well Dressed	0.08	0.21	0.08	0.21	0.08	0.26	0.04	0.23	0.08	0.77	0.08	0.38	0.08	0.38
Well spoken	0.08	0.23	0.07	0.23	0.07	0.29	0.02	0.13	0.07	0.87	0.07	0.42	0.08	0.45
Well-adjusted	0.01	0.16	0.02	0.47	0.00	0.00	0.00	0.20	0.01	0.80	0.01	0.40	0.01	0.40
Witty	0.01	0.04	0.03	0.16	0.09	0.55	0.02	0.20	0.04	0.79	0.02	0.20	0.07	0.60
Wrong	0.01	0.39	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.51	0.00	0.00	0.01	0.50

Note. FR = Family Resemblance, CV = Cue Validity score.

Table 3.
Study 1, Correlation Coefficients of the Cue Validities and Family Resemblance Scores of ethnicity/gender leader conditions and the Leader/Nonleader conditions.

LeaderCuebyLeadFR	0.21
LeaderCuebyMaleFR	0.22
LeaderCuebyFemaleFR	0.20
LeaderCuebyWhiteFR	0.22
LeaderCuebyBlackFR	0.19
LeaderCuebyHispanicFR	0.19
LeaderFRbyMaleFR	0.96
LeaderFRbyFemaleFR	0.97
LeaderFRbyWhiteFR	0.93
LeaderFRbyBlackFR	0.95
LeaderFRbyHispanicFR	0.93
NonLeadFRbyLeaderFR	-0.36
NonLeadFR by LeadCue	-1.00
NonLeadFRbyMaleFR	0.56
NonLeadFRbyFemaleFR	0.62
NonLeadFRbyWhiteFR	0.56
NonLeadFRbyBlackFR	0.55
NonLeadFRbyHispanicFR	0.61

LeaderCuebyMaleCue	0.64
LeaderCuebyFemaleCue	0.59
LeaderCuebyWhiteCue	0.56
LeaderCuebyBlackCue	0.47
LeaderCuebyHispanicCue	0.46
LeaderFRyMaleCue	0.10
LeaderFRbyFemaleCue	0.17
LeaderFRbyWhiteCue	-0.03
LeaderFRbyBlackCue	0.21
LeaderFRbyHispanicCue	0.22
NonleadCuebyLeader FR	0.00
NonleadCuebyLeaderCue	-1.00
NonLeadCuebyMaleCue	-0.65
NonLeadCuebyFemaleCue	-0.58
NonLeadCuebyWhiteCue	-0.57
NonLeadCuebyBlackCue	-0.45
NonLeadCuebyHispanicCue	-0.46

M.FRbyMCue	0.22
F.FRbyFCue	0.00
W.FRbyWCue	0.00
B.FRbyBCue	0.00
H.FRbyHCue	0.00

Note. Correlation Coefficients significant at $p < .05$,
FR = Family Resemblance Scores Cue = Cue Validity Scores.

Table 4.
Study 1, Mean of the Prototypicality Ratings Across the Conditions.

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Accessible	3.36	3.56	3.48	3.25	3.35	3.63	3.47
Accommodating	3.42	3.00	3.19	3.39	3.22	3.22	3.22
Active	3.50	3.79	3.77	3.81	3.76	3.59	3.68
Activist	3.68	3.20	3.35	2.94	3.35	3.48	3.41
Adaptable	3.49	3.74	3.48	3.60	3.43	3.73	3.56
Aggressive	3.49	3.07	3.06	3.02	3.26	3.17	3.21
Agreeable	3.51	3.49	3.36	3.21	3.41	3.48	3.45
Alert	3.68	3.77	3.48	3.79	3.49	3.84	3.66
Ambitious	3.93	3.84	4.07	3.61	3.92	3.98	3.95
Anxious	2.25	2.40	2.71	2.29	2.43	2.43	2.43
Appreciative	3.46	3.23	3.80	3.19	3.31	3.65	3.48
Approachable	3.51	3.49	3.63	3.48	3.52	3.56	3.54
Arrogant	2.81	2.74	3.00	2.84	2.98	2.66	2.84
Articulate	3.78	3.99	3.55	3.41	3.85	3.82	3.78
Artistic	2.82	2.57	2.83	3.43	2.50	3.00	2.74
Assertive	3.71	4.07	3.78	3.16	3.87	3.87	3.87
Attentive	3.53	3.54	3.18	3.84	3.37	3.50	3.44
Attractive	3.43	3.13	3.20	3.21	3.06	3.42	3.24
Audacious	2.91	2.95	2.91	2.76	2.85	3.00	2.92
Authentic	3.60	3.38	3.70	3.23	3.28	3.77	3.56
Authoritarian	3.31	3.43	3.00	2.44	3.39	3.11	3.27
Aware	3.62	3.63	3.62	3.75	3.65	3.58	3.62
Belligerent	2.32	2.17	2.37	2.38	2.22	2.31	2.27
Benevolent	2.83	3.00	3.10	2.81	2.89	3.03	2.97
Blunt	3.28	3.58	3.47	2.69	3.34	3.56	3.44
Boastful	2.84	3.00	2.62	2.88	2.97	2.64	2.81
Boisterous	3.36	2.58	2.62	3.35	2.98	2.68	2.85
Bold	3.98	3.45	3.64	3.47	3.73	3.65	3.69
Boring	2.09	2.38	1.95	1.79	2.28	1.97	2.14
Brave	3.58	3.56	3.32	3.20	3.52	3.43	3.48
Calm	2.87	3.31	2.89	3.02	3.05	3.00	3.03
Capable	3.74	4.08	3.50	3.55	3.59	4.02	3.79
Care free	2.82	2.49	2.30	2.83	2.45	2.62	2.54

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Caring	3.53	3.18	3.39	3.50	3.34	3.46	3.38
Cautious	2.76	3.13	3.24	2.82	2.93	3.19	3.05
Challenging	3.33	3.65	3.08	3.32	3.24	3.53	3.37
Charismatic	3.83	4.06	3.76	3.57	3.83	3.94	3.88
Charitable	3.52	3.37	3.61	3.05	3.20	3.74	3.50
Charming	3.17	3.26	3.50	3.41	3.33	3.28	3.31
Cheerful	3.37	3.20	3.26	3.30	3.14	3.44	3.27
Closed Minded	2.68	2.88	2.36	2.14	2.89	2.38	2.63
Cold	2.15	2.44	2.42	2.08	2.49	2.11	2.33
Collaborative	3.48	3.44	3.49	3.41	3.26	3.68	3.46
Collective	3.35	3.33	3.37	3.19	3.23	3.42	3.35
Comfortable	3.28	3.53	3.26	3.47	3.22	3.57	3.36
Comical	2.79	2.68	3.00	2.80	2.96	2.59	2.81
Committed	4.00	3.76	3.97	4.09	3.71	4.13	3.90
Common sense	3.45	3.30	3.67	3.61	3.45	3.48	3.46
Communal	2.89	2.67	3.38	3.19	2.89	2.98	2.94
Communicative	3.86	4.31	3.74	3.98	4.00	3.98	3.99
Communicator	3.87	3.96	3.63	3.61	3.83	3.86	3.84
Compassionate	3.64	3.41	3.53	3.23	3.27	3.75	3.53
Competent	3.68	3.92	3.44	3.72	3.57	3.79	3.68
Competitive	3.73	3.98	3.32	3.58	3.65	3.72	3.68
Complicated	2.98	3.09	2.78	2.91	2.65	3.31	2.95
Comprehensible	3.52	3.59	3.45	3.18	3.51	3.54	3.53
Concerned	3.10	3.42	3.72	3.23	3.26	3.55	3.40
Confident	3.87	4.07	3.86	3.50	3.88	4.02	3.94
Connected	3.37	3.73	3.63	3.37	3.59	3.57	3.58
Conscientious	3.36	3.49	3.54	3.10	3.37	3.56	3.46
Conservative	2.47	3.36	2.84	2.70	3.05	2.82	2.91
Considerate	3.60	3.47	3.58	3.26	3.37	3.69	3.55
Consistent	3.60	3.71	3.63	3.46	3.44	3.87	3.64
Conversational	3.76	3.70	3.61	3.41	3.57	3.83	3.69
Cool	3.46	3.14	3.00	3.25	3.33	3.08	3.19
Cooperative	3.41	3.50	3.52	3.46	3.37	3.59	3.48
Corrupt	1.94	2.13	2.17	2.21	2.38	1.74	2.07
Courageous	3.78	3.53	3.58	3.28	3.50	3.77	3.63

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Courteous	3.67	3.59	3.03	3.40	3.43	3.47	3.45
Crafty	2.79	2.92	3.32	2.60	3.04	2.95	3.00
Cranky	2.04	2.27	2.11	2.41	2.17	2.10	2.14
Creative	3.55	3.40	3.00	3.58	3.21	3.48	3.34
Crooked	1.97	2.04	1.98	2.21	2.30	1.73	2.00
Cultural	3.53	3.22	3.75	3.14	3.30	3.66	3.48
Cultured	3.33	3.38	3.67	2.90	3.34	3.62	3.45
Curious	2.84	3.16	3.25	3.38	2.93	3.20	3.06
Daring	3.26	3.46	2.92	3.17	3.18	3.32	3.25
Deceitful	1.96	2.73	2.03	2.02	2.33	2.08	2.22
Decisive	3.75	3.90	3.60	3.40	3.69	3.84	3.76
Dedicated	3.90	3.92	3.90	3.96	3.70	4.14	3.91
Defiant	3.03	3.09	2.73	2.67	2.88	3.06	2.96
Deliberate	3.64	3.67	3.72	3.67	3.60	3.75	3.68
Dependable	3.66	3.73	3.62	3.35	3.49	3.86	3.67
Detail Oriented	3.43	3.58	3.11	3.47	3.18	3.77	3.40
Determined	4.00	4.10	3.73	3.76	3.89	4.02	3.95
Difficult	2.55	2.85	2.61	2.81	2.67	2.71	2.68
Dignity	3.75	3.53	3.73	3.17	3.44	3.86	3.67
Diligent	3.30	3.88	3.51	3.62	3.34	3.76	3.56
Diplomatic	3.43	3.60	3.18	3.15	3.28	3.60	3.42
Direct	3.77	3.93	3.84	3.73	3.73	3.60	3.81
Dirty	1.94	1.58	1.61	2.03	1.75	2.15	1.74
Disciplined	3.67	3.86	3.77	3.78	3.71	3.64	3.76
Disciplined Practitioner	3.26	3.75	3.70	3.38	3.53	3.63	3.58
Dishonest	2.16	2.55	2.28	2.42	2.58	2.04	2.33
Dishonorable	3.67	3.86	3.77	3.78	3.71	3.64	3.76
Diverse	3.58	2.93	3.29	3.44	3.09	3.49	3.27
Dominating	2.97	3.54	3.03	2.71	3.18	3.16	3.17
Dramatic	3.33	2.94	3.19	3.47	3.13	3.14	3.13
Dutiful	3.29	3.60	3.47	3.37	3.32	3.63	3.46
Earthy	2.67	2.58	2.79	3.12	2.77	2.60	2.68
Educated	3.58	4.30	3.59	3.47	3.86	3.87	3.86
Effective	3.57	3.80	3.64	3.74	3.61	3.66	3.69
Efficient	3.56	3.90	3.45	3.67	3.56	3.83	3.68

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Egotistical	3.44	2.63	2.80	2.78	3.00	3.00	3.00
Elected	3.55	3.58	2.94	2.19	3.15	3.58	3.36
Elegant	2.58	3.42	3.31	2.67	2.92	3.31	3.12
Emotional	3.22	2.49	3.38	3.24	2.83	3.28	3.05
Empathetic	3.21	3.62	3.41	3.38	3.32	3.25	3.40
Empowering	3.40	3.67	3.34	2.79	3.38	3.62	3.49
Endearing	3.13	3.00	3.24	2.76	3.12	3.13	3.12
Energetic	3.82	3.69	3.71	3.79	3.60	3.92	3.75
Engaging	3.85	3.72	3.58	3.69	3.63	3.82	3.72
Enigmatic	3.11	3.14	2.79	2.83	3.00	3.08	3.04
Entertaining	3.20	3.18	3.34	3.24	3.25	3.22	3.24
Enthusiastic	3.76	3.73	3.65	3.89	3.56	3.96	3.72
Entitled	2.80	3.00	2.47	2.82	2.66	2.83	2.76
Esteemed	3.59	3.71	3.70	3.66	3.53	3.24	3.63
Ethical	3.77	3.62	3.65	3.11	3.46	3.91	3.68
Even keeled	3.13	3.65	3.19	3.03	3.48	3.23	3.35
Exemplary	3.48	3.43	3.46	2.97	3.20	3.64	3.46
Experienced	3.66	3.87	3.56	3.85	3.69	3.72	3.70
Extrovert	3.82	3.64	3.56	3.41	3.76	3.57	3.67
Failure	1.93	1.64	1.68	1.95	1.75	1.76	1.75
Fair	3.59	3.58	3.53	3.15	3.51	3.66	3.57
Faithful	3.52	3.40	3.63	2.93	3.27	3.68	3.51
Fake	2.11	2.34	1.88	2.58	2.34	1.95	2.11
Family-Oriented	3.63	3.61	4.00	3.16	3.62	3.76	3.73
Famous	2.80	2.76	2.83	2.32	2.98	2.63	2.80
Fanatical	2.71	2.64	2.53	2.59	2.81	2.44	2.63
Fascinating	3.44	3.16	3.06	3.04	3.06	3.42	3.22
Fashionable	3.49	3.00	3.42	2.77	3.02	3.62	3.31
Fearful	2.12	2.23	2.07	2.06	2.34	2.05	2.14
Feisty	3.14	3.29	3.32	2.75	2.97	3.54	3.25
Feminine	3.45	3.64	3.60	3.17	3.37	3.79	3.56
Feminist	3.84	4.06	3.57	3.88	3.66	4.03	3.84
Fierce	2.03	2.06	1.80	2.28	2.07	1.88	1.98
Flexible	3.33	3.42	3.46	3.41	3.29	3.49	3.40
Fluent	3.45	3.64	3.60	3.17	3.37	3.79	3.56

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Focused	3.84	4.06	3.57	3.88	3.66	4.03	3.84
Foolish	2.03	2.06	1.80	2.28	2.07	1.88	1.98
Forceful	3.27	3.46	3.28	2.83	3.18	3.54	3.34
Forgiving	3.18	3.17	3.29	3.00	3.02	3.33	3.21
Formidable	3.20	3.56	3.08	3.18	3.13	3.44	3.29
Friendly	3.68	3.58	3.78	3.65	3.60	3.73	3.68
Frugal	2.80	3.07	3.00	2.59	2.89	3.06	2.96
Fun	2.80	3.07	3.00	2.59	2.89	3.06	2.96
Funny	3.26	3.07	3.27	3.30	3.16	3.21	3.20
Generous	3.42	3.32	3.25	3.33	3.18	3.51	3.33
Gentle	2.93	2.89	3.15	3.32	3.08	2.88	2.99
Genuine	3.44	3.33	3.63	3.16	3.36	3.62	3.48
Glamorous	2.84	2.82	2.78	2.37	2.53	3.10	2.81
Greedy	2.22	2.81	2.30	2.43	2.76	2.17	2.45
Grounded	3.33	3.21	2.94	3.15	3.00	3.36	3.17
Gruff	2.48	2.26	2.22	2.88	2.32	2.35	2.34
Handy	2.87	2.67	2.73	3.51	2.83	2.67	2.76
Happy	3.56	3.11	3.59	3.46	3.32	3.47	3.39
Hard worker	3.81	3.90	3.84	3.56	3.69	4.04	3.85
Hardworking	3.73	3.94	4.05	3.84	3.93	3.86	3.90
Harmonious	3.34	3.35	3.39	3.13	3.11	3.55	3.36
Harsh	3.81	3.90	3.84	3.56	3.69	4.04	3.85
Heartless	3.73	3.94	4.05	3.84	3.93	3.86	3.90
Helpful	3.43	3.18	3.29	3.33	3.26	3.35	3.30
Hierarchal	3.12	3.09	3.03	2.81	3.06	3.11	3.08
Honest	3.30	3.40	3.35	3.32	3.13	3.63	3.35
Honorable	3.76	3.52	3.76	3.12	3.51	3.82	3.68
Humble	3.13	3.03	3.28	2.95	2.90	3.30	3.14
Humorous	3.49	3.08	3.12	3.12	3.31	3.09	3.21
Idealistic	3.43	3.42	3.59	3.27	3.24	3.66	3.47
Impolite	2.65	1.80	2.45	2.63	2.44	2.22	2.33
Imposter	2.02	2.16	1.84	2.06	2.19	1.88	2.04
Impressive	3.41	3.49	3.20	3.33	3.09	3.65	3.36
Improper	2.02	2.07	2.00	2.35	2.17	1.94	2.03
Independent	3.68	3.68	3.64	3.48	3.37	3.94	3.67

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Industrious	3.42	3.42	3.36	3.45	3.44	3.35	3.40
Influential	3.50	3.77	3.31	3.00	3.50	3.60	3.56
Informal	2.46	2.65	2.90	2.93	2.57	2.79	2.68
Innocent	2.48	2.57	2.73	2.40	2.40	2.72	2.59
Innovative	3.53	3.56	3.46	3.24	3.41	3.64	3.52
Insistent	3.59	3.53	3.48	3.43	3.45	3.67	3.54
Inspirational	3.73	3.39	3.64	3.15	3.33	3.79	3.58
Inspiring	3.31	3.60	3.35	2.98	3.34	3.53	3.43
Instrumental	3.31	2.97	2.93	2.85	3.04	3.12	3.08
Integrity	2.33	1.53	2.79	2.38	2.17	2.19	2.86
Intelligent	3.86	4.12	3.73	3.46	3.81	4.07	3.90
Intense	3.67	3.45	3.65	3.49	3.47	3.63	3.59
Intimidating	2.76	2.97	2.57	2.41	2.71	2.85	2.77
Intolerant	2.41	2.61	2.35	2.29	2.41	2.50	2.45
Introspective	2.72	2.62	2.71	2.82	2.73	2.63	2.69
Intuitive	3.58	3.65	3.48	3.30	3.41	3.80	3.57
Inventive	3.20	3.47	3.32	3.24	3.28	3.37	3.33
Involved	3.74	4.02	3.59	3.63	3.68	3.95	3.79
Irresponsible	2.03	2.00	2.16	2.10	2.16	1.96	2.07
Joyful	3.28	2.74	3.59	3.21	3.06	3.38	3.21
Judged	3.58	3.07	3.50	2.65	3.28	3.44	3.37
Judgmental	2.93	2.97	2.82	2.83	3.06	2.85	2.91
Just	3.35	3.60	3.69	2.93	3.34	3.71	3.54
Kind	3.25	3.30	3.47	3.35	3.13	3.54	3.33
Knowledgeable	3.84	4.13	3.69	3.62	3.79	4.03	3.89
Law-abiding	3.75	3.77	3.58	3.17	3.61	3.87	3.71
Lazy	1.70	1.92	1.81	1.71	1.88	1.73	1.82
Liberal	3.68	3.06	3.49	3.18	3.11	3.66	3.39
Likeable	3.31	3.63	3.85	3.46	3.50	3.62	3.56
Listener	3.48	3.41	3.35	3.33	3.32	3.50	3.41
Listens	3.40	3.34	3.31	3.48	3.25	3.45	3.36
Low Income	2.33	1.53	2.79	2.38	2.17	2.19	2.18
Manager	3.17	2.89	2.58	3.02	3.61	2.05	2.86
Manly	3.11	2.98	2.72	2.87	3.58	2.31	2.95
Masculine	2.27	2.38	2.09	2.24	2.32	2.16	2.25

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Menial	3.21	3.67	3.23	3.17	3.20	3.60	3.40
Meticulous	2.47	3.04	2.64	2.67	2.59	2.85	2.72
Mindful	3.61	3.44	3.64	3.04	3.35	3.77	3.56
Modest	2.80	2.74	3.30	2.47	3.04	2.82	2.95
Money oriented	3.07	3.58	3.10	3.25	3.48	3.04	3.27
Moody	2.74	2.62	2.64	2.86	2.40	3.00	2.67
Moral	3.52	3.46	3.55	3.04	3.22	3.76	3.52
Motivated	3.87	4.07	3.76	3.90	3.76	4.07	3.92
Musical	2.62	2.43	2.60	2.85	2.41	2.69	2.55
Noble	3.50	3.13	3.36	2.86	3.23	3.47	3.33
Nurturing	3.06	2.89	3.24	2.81	2.79	3.35	3.06
Obnoxious	2.42	2.38	1.98	2.42	2.33	2.17	2.25
Observant	3.59	3.92	3.45	3.62	3.63	3.75	3.69
Older	2.95	3.57	2.94	2.81	3.21	3.08	3.15
Open-minded	3.45	3.46	3.43	3.30	3.28	3.60	3.44
Opinionated	3.77	3.47	3.46	3.42	3.44	3.71	3.58
Optimistic	3.64	3.78	3.70	3.46	3.61	3.80	3.71
Orderly	3.69	3.82	3.64	3.35	3.56	3.89	3.72
Organized	3.69	3.88	3.66	3.56	3.69	3.91	3.77
Outgoing	3.98	3.72	3.68	3.75	3.53	3.86	3.74
Overworked	3.05	3.28	3.06	3.31	2.97	3.37	3.14
Partier	1.95	2.02	2.33	2.97	2.31	1.85	2.10
Passionate	3.96	3.60	3.91	3.70	3.63	4.00	3.82
Patient	3.27	3.44	3.27	3.22	3.29	3.42	3.32
Peacemaker	3.08	3.49	3.24	3.25	3.23	3.26	3.25
Perceptive	3.59	3.65	3.69	3.52	3.41	3.84	3.64
Perfectionist	3.13	3.55	3.00	3.20	3.02	3.45	3.23
Performer	3.13	3.05	3.47	3.73	3.33	3.06	3.20
Persistent	3.56	3.93	3.47	3.86	3.61	3.73	3.66
Persuadable	2.67	3.15	2.94	2.85	2.97	2.84	2.91
Persuasive	3.80	3.78	3.41	3.19	3.58	3.79	3.66
Philanthropic	3.10	3.23	3.08	2.75	2.99	3.30	3.13
Playful	2.61	2.57	2.97	2.89	2.64	2.75	2.70
Pliable	2.77	2.90	2.82	2.93	2.82	2.84	2.82
Polished	3.53	3.76	3.36	3.20	3.62	3.48	3.55

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Poor	2.10	1.62	2.39	2.34	1.94	2.23	2.07
Power-hungry	2.73	3.14	2.93	2.56	3.02	2.86	2.94
Powerful	3.70	3.83	3.49	3.06	3.76	3.65	3.69
Practical	3.34	3.89	3.35	3.41	3.52	3.60	3.55
Pragmatic	3.38	3.25	3.38	3.12	3.19	3.43	3.34
Prepared	3.58	3.82	3.52	3.51	3.42	3.87	3.64
Privileged	2.35	3.30	2.29	2.64	2.72	2.65	2.68
Professional	3.78	4.12	3.44	3.93	3.67	3.90	3.78
Progressive	3.72	3.37	3.60	3.30	3.26	3.83	3.56
Prompt	3.38	3.59	3.58	3.43	3.37	3.69	3.52
Proper	3.50	3.66	3.54	3.03	3.43	3.69	3.56
Proud	3.90	3.88	3.95	3.73	3.93	3.91	3.91
Punctual	3.42	3.85	3.12	3.40	3.43	3.58	3.51
Quick thinking	3.58	3.84	3.32	3.78	3.42	3.80	3.61
Quiet	1.93	2.26	2.39	2.27	2.22	2.11	2.17
Rare	3.17	2.61	3.05	2.42	2.59	3.23	2.94
Rational	3.33	3.83	3.50	3.13	3.52	3.60	3.55
Reasonable	3.13	3.34	3.39	3.25	3.12	3.39	3.27
Relaxed	2.91	3.12	2.95	3.07	2.98	3.02	3.00
Reliable	3.34	3.71	3.56	3.46	3.36	3.66	3.52
Religious	3.44	3.05	3.70	2.54	3.30	3.40	3.38
Reserved	3.26	2.87	3.81	2.58	3.22	3.24	3.23
Resilient	2.12	2.74	2.66	2.70	2.52	2.45	2.49
Resourceful	3.43	3.70	3.81	3.79	3.49	3.76	3.62
Respectable	3.71	3.83	3.67	3.70	3.68	3.83	3.75
Respected	3.63	4.00	3.66	3.55	3.70	3.84	3.77
Respectful	3.64	3.71	3.74	3.28	3.60	3.76	3.69
Responsible	3.78	3.87	3.79	3.47	3.65	4.00	3.81
Righteous	3.28	3.27	3.44	2.94	3.23	3.41	3.33
Risk taker	3.50	3.47	3.08	3.33	3.53	3.20	3.37
Role model	3.72	3.66	3.65	3.01	3.52	3.88	3.68
Ruthless	2.60	2.65	2.46	2.51	2.81	2.35	2.57
Safety-Conscious	3.49	3.30	3.00	3.17	3.23	3.30	3.26
Saintly	2.53	2.41	2.57	2.28	2.28	2.71	2.50
Samaritan	3.36	3.14	3.43	2.98	3.14	3.49	3.31

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Sarcastic	2.12	2.81	2.30	2.73	2.64	2.16	2.40
Savvy	3.00	2.98	3.06	3.19	2.82	3.25	3.01
Scrupulous	3.19	3.13	3.15	2.95	3.18	3.16	3.16
Selfish	2.12	2.81	2.30	2.73	2.64	2.16	2.40
Sensitive	3.00	2.98	3.06	3.19	2.82	3.25	3.01
Serious	3.74	3.89	3.05	3.36	3.75	3.46	3.60
Sharp	3.69	3.95	3.29	3.44	3.68	3.59	3.64
Simple	2.60	2.83	2.95	2.87	2.69	2.78	2.79
Skilled	3.66	4.02	3.70	4.09	3.69	3.92	3.80
Sneaky	2.05	2.34	2.09	2.40	2.35	1.96	2.16
Sociable	3.85	3.86	3.89	4.00	3.74	4.00	3.87
Socially-conscious	3.88	3.68	3.25	3.28	3.42	3.88	3.62
Sophisticated	3.29	3.62	3.32	2.93	3.39	3.44	3.42
Special	3.26	3.07	3.19	3.00	2.99	3.36	3.18
Spiritual	3.65	3.08	3.61	2.69	3.37	3.47	3.45
Stable	3.53	3.83	3.09	3.08	3.56	3.44	3.50
Steadfast	3.64	3.55	3.53	3.40	3.50	3.68	3.58
Stern	3.19	3.25	2.89	2.66	3.11	3.13	3.12
Strategic	3.60	3.98	3.50	3.59	3.65	3.74	3.70
Stressed	2.74	2.49	2.49	2.73	2.57	2.57	3.20
Strict	3.22	3.16	2.77	2.66	2.92	3.12	3.03
Strong	3.98	4.07	3.80	3.34	3.85	4.06	3.95
Stubborn	3.11	2.83	3.11	3.37	2.78	3.23	3.02
Studious	3.31	3.51	3.21	2.98	3.30	3.40	3.35
Stylish	3.02	3.52	3.31	2.83	3.12	3.50	3.29
Suave	3.23	3.00	3.40	2.83	3.37	3.05	3.21
Successful	3.65	4.07	3.68	3.33	3.79	3.87	3.82
Superficial	2.31	2.44	2.33	2.73	2.48	2.25	2.36
Supportive	3.43	3.26	3.30	3.45	3.19	3.48	3.33
Sweet	2.49	2.41	3.00	2.90	2.38	2.94	2.63
Sympathetic	3.21	3.29	3.65	3.32	3.38	3.39	3.38
Tactful	3.17	3.33	3.39	3.24	3.11	3.56	3.30
Talented	3.62	3.71	3.48	3.39	3.41	3.78	3.60
Talkative	3.80	3.54	3.68	3.49	3.64	3.73	3.68
Task-Oriented	3.57	3.94	3.60	3.60	3.57	3.83	3.71

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Terrifying	3.19	3.25	2.89	2.66	3.11	3.13	3.12
Thoughtful	3.55	3.49	3.70	3.31	3.32	3.81	3.58
Tidy	3.19	3.45	3.46	3.35	3.39	3.34	3.37
Tolerant	3.15	2.89	3.26	3.04	2.95	3.23	3.08
Tough	3.31	3.76	3.41	3.27	3.48	3.47	3.47
Traditional	3.11	3.25	3.12	3.19	3.12	3.21	3.17
Transparent	2.92	3.03	2.83	2.87	2.95	3.02	2.93
Trendsetter	3.12	2.98	3.30	2.83	3.09	3.16	3.12
Trustworthy	3.62	3.58	3.53	3.18	3.41	3.74	3.58
Uncompromising	2.79	3.09	2.71	2.89	2.91	2.81	2.87
Underachiever	1.89	1.55	2.26	2.05	1.84	1.93	1.88
Underappreciated	3.10	2.13	2.93	3.29	2.43	3.14	2.72
Underdog	3.33	2.03	3.21	2.80	2.79	2.95	2.86
Understanding	3.48	3.27	3.52	3.23	3.10	3.78	3.40
Uneducated	1.95	1.56	2.33	2.30	1.89	1.85	1.87
Unfair	1.91	2.12	2.05	2.10	2.12	1.91	2.03
Unflappable	3.10	3.05	2.82	3.27	3.01	3.00	3.01
Unhealthy	1.73	1.88	2.08	2.18	1.94	1.84	1.89
Unique	3.27	3.27	3.58	3.20	3.15	3.53	3.34
Unpredictable	2.74	2.49	2.49	2.73	2.57	2.57	2.57
Unprofessional	1.87	1.73	1.93	2.08	1.91	1.71	1.84
Unscrupulous	2.47	2.57	2.48	2.55	2.55	2.50	2.51
Unskilled	2.19	2.12	1.79	2.10	2.19	1.94	2.08
Unusual	2.79	2.67	2.30	2.66	2.53	2.72	2.62
Uplifting	3.07	3.23	3.24	3.31	2.93	3.51	3.20
Vain	2.52	2.95	2.39	2.61	2.79	2.47	2.62
Value-oriented	3.70	3.73	3.81	3.12	3.56	3.91	3.74
Vibrant	3.06	3.26	3.60	3.39	3.06	3.56	3.28
Vigilant	3.47	3.55	3.60	3.24	3.54	3.54	3.54
Visionary	3.28	3.67	3.62	2.75	3.44	3.61	3.53
Vivacious	3.14	2.93	3.64	2.89	2.94	3.43	3.21
Volatile	2.56	2.49	2.72	2.56	2.65	2.49	2.58
Warm	3.22	3.16	3.50	3.44	3.33	3.24	3.28
Wealthy	3.05	3.54	2.82	2.56	3.14	3.15	3.14

Prototypical CABs	Black	White	Hispanic	NonLeader	Male	Female	Leader
Weary	2.32	2.20	2.30	2.51	2.26	2.27	2.27
Well Dressed	3.56	4.00	3.41	3.02	3.58	3.76	3.67
Well spoken	3.75	3.99	3.72	3.54	3.84	3.88	3.82
Well-adjusted	3.44	3.45	3.56	3.07	3.41	3.58	3.48
Witty	3.65	3.34	3.03	3.33	3.48	3.23	3.36
Wrong	1.86	2.06	1.70	2.00	2.10	1.78	1.88
Mean	3.20	3.24	3.19	3.09	3.15	3.27	3.21
max	4.00	4.31	4.07	4.09	4.00	4.14	3.99
min	1.70	1.53	1.61	1.71	1.75	1.71	1.74
t-Value, Leader	0.94	1.13	1.15	3.49	1.99	1.70	
t-test, p-values, Leader	0.35	0.26	0.25	0.00	0.05	0.09	
t-values, Nonleader	3.04	3.95	2.79		1.98	4.58	
t-test p-values, Nonlead	0.00	0.00	0.01		0.05	0.00	
t-values, Male to female					3.15		
t-test *p*-values, Male to female					0.00		
t-values, race-by-race,	1.41	1.64	0.86				
t-test *p*-value, race-by-race	0.16	0.10	0.39				
r for race by leader cond	0.96	0.94	0.94	0.83	0.96	0.97	
r for race by nonleader	0.82	0.78	0.79		0.81	0.81	
r for Gend	0.88						

Note: *N*= 505, *t*-test significant at $p < .05$, two-tailed, correlations significant at $p < .05$. Bold CABs indicate that they were generated in the ethical person condition. Red = over the mean inclusion score for significant for that category, yellow = less than 2 on the 1 to 5 prototypicality rating scale.

Table 5.
Study 1, Significant Main Effects on the CABs for the Leader Race

CAB-Significant for Leader Race	*p*	η_P^2	Hispanic	White	Black
Accommodating	0.050	.020	3.196	3.017	3.472
Active	0.080	.016	3.806	3.787	3.496
Activist	0.021	.023	3.354	3.231	3.685
Aggressive	0.032	.019	3.054	3.075	3.486
Anxious	0.058	.016	2.705	2.379	2.263
Appreciative	0.003	.033	3.81	3.244	3.475
Articulate	0.000	.012	3.545	4.009	3.741
Assertive	0.085	.015	3.782	4.066	3.717
Attentive	0.099	.013	3.178	3.543	3.532
Authentic	0.097	.005	3.709	3.373	3.612
Authoritarian	0.012	.025	2.89	3.413	3.316
Boisterous	0.065	.065	2.649	2.577	3.335
Bold	0.008	.025	3.643	3.451	3.971
Calm	0.013	.025	2.867	3.361	2.851
Capable	0.006	.029	3.514	4.074	3.794
Care free	0.042	.019	2.3	2.482	2.829
Cautious	0.048	.018	3.232	3.155	2.754
Challenging	0.007	.029	3.135	3.684	3.294
Closed Minded	0.089	.013	2.371	2.78	2.703
Comfortable	0.090	.013	3.267	3.602	3.3
Communal	0.001	.038	3.394	2.674	2.899
Communicative	0.005	.038	3.713	4.314	3.875
Compassionate	0.036	.005	3.504	3.399	3.687
Competent	0.044	.019	3.437	3.893	3.676
Competitive	0.002	.036	3.325	3.979	3.725
Complicated	0.057	.016	2.758	3.24	2.942
Concerned	0.002	.031	3.719	3.481	3.095
Conservative	0.000	.045	2.794	3.299	2.384
Cool	0.026	.021	3	3.139	3.494
Courageous	0.084	.004	3.532	3.495	3.736
Courteous	0.000	.047	2.98	3.576	3.667
Crafty	0.022	.023	3.322	2.931	2.788
Creative	0.003	.030	3	3.434	3.545
Cultural	0.017	.023	3.719	3.25	3.536
Daring	0.021	.024	2.915	3.471	3.293
Deceitful	0.001	.043	2.031	2.671	1.956

CAB-Significant for Leader Race	*p*	η_P^2	Hispanic	White	Black
Decisive	0.027	.005	3.572	3.883	3.727
Detail Oriented	0.019	.022	3.155	3.671	3.508
Determined	0.029	.019	3.734	4.176	4.003
Diligent	0.002	.035	3.517	3.866	3.263
Disciplined Practitioner	0.006	.027	3.685	3.75	3.262
Diverse	0.004	.031	3.312	3.007	3.574
Dominating	0.010	.028	3.007	3.544	2.991
Educated	0.000	.067	3.589	4.311	3.585
Effective	0.042	.005	3.67	3.804	3.555
Efficient	0.009	.028	3.333	3.922	3.55
Egotistical	0.001	.043	2.795	2.667	3.437
Elected	0.001	.044	2.906	3.545	3.563
Elegant	0.000	.067	3.244	3.42	2.556
Emotional	0.000	.061	3.343	2.521	3.217
Entitled	0.027	.020	2.466	3	2.707
Experienced	0.003	.009	3.538	3.885	3.666
Fake	0.003	.009	1.879	2.376	2.207
Family-Oriented	0.000	.042	3.944	3.564	3.219
Fashionable	0.021	.023	3.415	3	3.492
Feminist	0.050	0.016	2.712	2.493	2.947
Focused	0.004	0.03	3.586	4.063	3.797
Formidable	0.005	0.032	3.03	3.616	3.201
Funny	0.078	0.004	3.03	3.616	3.201
Greedy	0.004	0.032	2.314	2.849	2.222
Happy	0.004	0.032	3.588	3.119	3.557
Humorous	0.061	0.016	3.588	3.119	3.557
Impolite	0.000	0.058	2.447	1.8	2.661
Influential	0.044	0.018	3.25	3.778	3.488
Informal	0.035	0.019	2.947	2.698	2.467
Inspirational	0.029	0.005	3.583	3.373	3.68
Instrumental	0.057	0.017	2.912	2.986	3.319
Integrity	0.002	0.037	3.225	3.859	3.449
Intelligent	0.000	0.014	3.713	4.166	3.806
Involved	0.018	0.021	3.617	4.067	3.743
Joyful	0.000	0.058	3.583	2.788	3.272
Judged	0.023	0.021	3.467	3.053	3.557
Knowledgeable	0.000	.014	3.682	4.142	3.836

CAB-Significant for Leader Race	*p*	η_P^2	Hispanic	White	Black
Liberal	0.002	.032	3.436	3.077	3.697
Likeable	0.003	.031	3.855	3.656	3.331
Low Income	0.000	.126	2.783	1.527	2.31
Manager	0.003	.031	2.643	3.045	2.462
Manly	0.074	.016	2.73	2.777	3.12
Masculine	0.072	.015	2.819	2.858	3.195
Meticulous	0.011	.025	3.246	3.736	3.226
Modest	0.000	.047	3.313	2.719	2.635
Money oriented	0.050	.017	3.1	3.5	3.075
Noble	0.037	.007	3.369	3.12	3.505
Obnoxious	0.042	.018	1.979	2.377	2.417
Observant	0.005	.028	3.446	3.97	3.587
Older	0.000	.048	2.938	3.552	2.893
Opinionated	0.063	.015	3.442	3.467	3.799
Organized	0.012	.006	3.567	3.883	3.7
Partier	0.040	.016	2.332	1.954	1.955
Passionate	0.000	.013	3.921	3.566	4.015
Peacemaker	0.049	.015	3.246	3.481	3.079
Perfectionist	0.007	.030	2.972	3.556	3.156
Performer	0.089	.015	3.469	3.058	3.075
Persistent	0.010	.025	3.512	3.959	3.538
Persuadable	0.011	.026	2.978	3.168	2.666
Persuasive	0.027	.020	3.406	3.855	3.81
Playful	0.079	.014	2.971	2.569	2.605
Polished	0.054	.016	3.363	3.768	3.527
Poor	0.000	.050	2.392	1.629	2.109
Powerful	0.002	.009	3.432	3.836	3.709
Practical	0.002	.037	3.344	3.891	3.329
Privileged	0.000	.096	2.304	3.309	2.346
Professional	0.002	.038	3.474	4.118	3.776
Progressive	0.031	.005	3.581	3.423	3.723
Punctual	0.000	.057	3.105	3.865	3.404
Quick thinking	0.006	0.027	3.324	3.868	3.57
Quiet	0.044	0.018	2.333	2.237	1.932
Rare	0.001	0.014	3.056	2.588	3.173
Rational	0.006	0.026	3.532	3.826	3.312
Religious	0.000	0.027	3.716	2.997	3.41
Reserved	0.002	0.039	2.649	2.701	2.118

CAB-Significant for Leader Race	*p*	η_P^2	Hispanic	White	Black
Resilient	0.049	0.017	3.817	3.718	3.402
Respectable	0.025	0.019	3.658	4.003	3.63
Respected	0.062	.015	3.687	3.814	3.369
Safety-Conscious	0.051	.016	3	3.307	3.485
Selfish	0.011	.027	2.321	2.735	2.123
Serious	0.000	.085	3.003	3.865	3.791
Sharp	0.002	.037	3.284	3.955	3.643
Simple	0.069	.005	2.951	2.835	2.61
Skilled	0.077	.016	3.703	3.995	3.679
Socially-conscious	0.001	.040	3.25	3.78	3.903
Sophisticated	0.069	.015	3.309	3.621	3.27
Spiritual	0.000	.017	3.611	3.084	3.654
Stable	0.000	.048	3.086	3.831	3.528
Strategic	0.014	.024	3.449	3.977	3.6
Strict	0.010	.025	2.731	3.167	3.203
Stylish	0.005	.028	3.286	3.546	3.02
Suave	0.043	.019	3.46	2.966	3.23
Successful	0.017	.024	3.717	4.07	3.641
Sweet	0.001	.039	3.074	2.432	2.492
Sympathetic	0.020	.022	3.65	3.289	3.171
Task-Oriented	0.023	.021	3.566	3.937	3.549
Terrifying	0.001	.039	1.767	1.771	2.329
Thoughtful	0.073	.004	3.708	3.486	3.504
Tough	0.023	.020	3.425	3.766	3.266
Underachiever	0.001	.041	2.252	1.55	1.892
Underdog	0.000	.147	3.205	2.034	3.317
Uneducated	0.000	.048	2.361	1.557	1.924
Unfair	0.088	.004	2.026	2.125	1.881
Unusual	0.052	.017	2.29	2.731	2.776
Vain	0.024	.022	2.369	2.953	2.549
Vibrant	0.010	.026	3.609	3.287	3.09
Vivacious	0.003	.035	3.626	2.965	3.121
Wealthy	0.001	.042	2.803	3.527	3.067
Well Dressed	0.000	.050	3.298	4.006	3.449
Witty	0.002	.038	3.025	3.338	3.656
Wrong	0.040	.006	1.705	2.068	1.855
Underappreciated	0.001	.044	2.906	2.308	3.118

Note: *N* range from 60-110, yellow indicates $p < .05$, green indicates a trend from $p < .05$-.10.

Table 6.
Study 1, Significant Main Effects on the CABs for the Leader Gender.

CAB-Significant for Leader Gender	*p*	η_p^2	Male	Female	NonLeader
Accessible	0.060	0.009	3.35	3.62	3.25
Adaptable	0.036	0.013	3.43	3.73	3.60
Alert	0.003	0.026	3.47	3.86	3.79
Appreciative	0.040	0.012	3.37	3.65	3.19
Arrogant	0.084	0.008	2.97	2.65	2.84
Artistic	0.004	0.026	2.50	2.99	3.43
Attractive	0.007	0.020	3.06	3.44	3.21
Authentic	0.002	0.010	3.36	3.77	3.23
Authoritarian	0.018	0.016	3.38	3.04	2.44
Boastful	0.068	0.009	2.97	2.68	2.88
Boisterous	0.050	0.014	3.01	2.70	3.35
Capable	0.004	0.025	3.59	4.00	3.55
Challenging	0.280	0.014	3.21	3.54	3.32
Charitable	0.000	0.016	3.26	3.74	3.05
Cheerful	0.007	0.021	3.13	3.50	3.30
Closed Minded	0.006	0.020	2.85	2.39	2.14
Collaborative	0.003	0.024	3.27	3.70	3.41
Comfortable	0.015	0.016	3.22	3.56	3.47
Comical	0.013	0.018	2.98	2.59	2.80
Committed	0.001	0.031	3.77	4.16	4.09
Compassionate	0.000	0.013	3.33	3.73	3.23
Complicated	0.000	0.051	2.62	3.35	2.91
Concerned	0.067	0.009	3.30	3.56	3.23
Considerate	0.007	0.005	3.41	3.66	3.26
Consistent	0.000	0.013	3.43	3.86	3.46
Conversational	0.095	0.008	3.56	3.81	3.41
Cool	0.087	0.008	3.34	3.08	3.25
Cooperative	0.018	0.004	3.35	3.56	3.46
Corrupt	0.000	0.024	2.40	1.75	2.21
Courageous	0.004	0.006	3.45	3.73	3.28
Creative	0.049	0.010	3.20	3.45	3.58
Crooked	0.000	0.015	2.25	1.74	2.21
Cultural	0.012	0.018	3.33	3.67	3.14
Cultured	0.077	0.009	3.34	3.62	2.90
Curious	0.095	0.009	2.94	3.21	3.21

CAB-Significant for Leader Gender	*p*	η_p^2	Male	Female	NonLeader
Decisive	0.054	0.003	3.64	3.82	3.40
Dedicated	0.000	0.018	3.68	4.11	3.96
Dependable	0.000	0.010	3.49	3.84	3.35
Detail Oriented	0.000	0.038	3.16	3.73	3.48
Dignity	0.001	0.010	3.48	3.86	3.17
Diligent	0.003	0.025	3.34	3.76	3.62
Dirty	0.025	0.004	1.83	1.62	2.25
Disciplined	0.072	0.003	3.65	3.86	3.64
Dishonest	0.000	0.037	2.62	2.03	2.42
Dishonorable	0.000	0.013	2.11	1.67	2.14
Diverse	0.005	0.022	3.10	3.50	3.44
Dutiful	0.033	0.013	3.31	3.63	3.37
Effective	0.015	0.004	3.57	3.78	3.63
Efficient	0.002	0.029	3.35	3.85	3.67
Elected	0.007	0.023	3.11	3.56	2.19
Elegant	0.058	0.011	2.93	3.22	2.67
Emotional	0.014	0.017	2.85	3.21	3.24
Empathetic	0.000	0.018	3.12	3.59	3.24
Energetic	0.009	0.020	3.58	3.95	3.79
Engaging	0.079	0.008	3.59	3.82	3.69
Enthusiastic	0.004	0.023	3.57	3.97	3.89
Ethical	0.000	0.013	3.45	3.91	3.11
Exemplary	0.003	0.009	3.28	3.64	2.97
Faithful	0.007	0.007	3.35	3.68	2.93
Fake	0.018	0.004	2.29	2.02	2.58
Fanatical	0.020	0.016	2.83	2.43	2.59
Fascinating	0.042	0.013	3.10	3.41	3.04
Fashionable	0.000	0.046	2.99	3.62	2.77
Feminine	0.000	0.228	1.81	3.38	2.35
Feminist	0.000	0.141	2.14	3.30	2.18
Fierce	0.001	0.032	3.00	3.55	2.75
Fluent	0.006	0.028	3.36	3.77	3.17
Focused	0.001	0.030	3.17	3.56	2.83
Forceful	0.010	0.018	3.17	3.56	2.83
Forgiving	0.050	0.004	3.09	3.33	3.00
Formidable	0.012	0.019	3.09	3.47	3.18
Generous	0.019	0.017	3.28	3.32	3.44

CAB-Significant for Leader Gender	*p*	η_p^2	Male	Female	NonLeader
Genuine	0.090	0.009	3.34	3.62	3.16
Glamorous	0.000	0.044	2.53	3.14	2.37
Greedy	0.001	0.033	2.75	2.18	2.43
Grounded	0.028	0.014	3.00	3.34	3.15
Hard worker	0.016	0.016	3.69	4.03	3.56
Harmonious	0.001	0.010	3.17	3.55	3.13
Helpful	0.000	0.011	3.42	3.79	3.48
Honest	0.002	0.025	3.15	3.59	3.32
Honorable	0.020	0.005	3.53	3.82	3.12
Humble	0.002	0.002	2.94	3.24	2.95
Humorous	0.092	0.008	3.35	3.10	3.12
Idealistic	0.000	0.010	3.28	3.64	3.27
Imposter	0.022	0.014	2.19	1.80	2.06
Impressive	0.000	0.044	3.09	3.68	3.33
Independent	0.000	0.013	3.58	3.97	3.54
Innocent	0.027	0.005	2.46	2.73	2.40
Innovative	0.037	0.003	3.40	3.61	3.24
Intuitive	0.005	0.020	3.415[a]	3.817[a]	3.304[a]
Insistent	0.005	0.006	3.40	3.67	3.43
Inspirational	0.000	0.014	3.33	3.76	3.15
Inspiring	0.068	0.009	3.31	3.56	2.98
Intelligent	0.001	0.009	3.74	4.05	3.46
Involved	0.036	0.011	3.67	3.95	3.63
Joyful	0.097	0.008	3.10	3.33	3.21
Just	0.008	0.020	3.34	3.72	2.93
Kind	0.003	0.024	3.11	3.53	3.35
Knowledgeable	0.006	0.006	3.77	4.01	3.62
Law-abiding	0.005	0.008	3.54	3.87	3.17
Liberal	0.000	0.035	3.13	3.67	3.18
Likeable	0.082	0.008	3.50	3.73	3.46
Manager	0.038	0.012	2.57	2.87	2.67
Manly	0.000	0.238	3.60	2.15	3.02
Masculine	0.000	0.194	3.63	2.29	2.87
Meticulous	0.012	0.018	3.19	3.61	3.17
Mindful	0.000	0.010	3.37	3.70	3.27
Money oriented	0.025	0.014	3.41	3.04	3.25
Moody	0.000	0.037	2.40	3.00	2.86

CAB-Significant for Leader Gender	*p*	η_p^2	Male	Female	NonLeader
Moral	0.000	0.022	3.19	0.07	3.04
Motivated	0.001	0.030	3.69	4.13	3.90
Noble	0.024	0.005	3.19	3.47	2.86
Nurturing	0.001	0.029	2.84	3.31	2.81
Open-minded	0.016	0.004	3.29	3.52	3.30
Opinionated	0.060	0.009	3.44	3.70	3.42
Optimistic	0.008	0.005	3.59	3.82	3.46
Orderly	0.005	0.008	3.56	3.88	3.35
Organized	0.003	0.006	3.59	3.84	3.51
Outgoing	0.064	0.002	3.81	3.97	3.85
Overworked	0.014	0.016	2.97	3.40	3.31
Partier	0.001	0.029	2.33	1.83	2.97
Passionate	0.000	0.011	3.65	4.02	3.70
Perceptive	0.001	0.011	3.45	3.84	3.52
Perfectionist	0.007	0.022	3.02	3.44	3.20
Performer	0.091	0.009	3.35	3.06	3.73
Persistent	0.090	0.008	3.56	3.78	3.86
Philanthropic	0.007	0.020	2.98	3.37	2.76
Pragmatic	0.051	0.003	3.24	3.42	3.12
Prepared	0.001	0.028	3.43	3.85	3.51
Progressive	0.000	0.018	3.34	3.81	3.30
Prompt	0.028	0.014	3.36	3.69	3.43
Proper	0.045	0.004	3.45	3.68	3.03
Quick thinking	0.007	0.019	3.40	3.78	3.78
Rare	0.000	0.017	2.65	3.23	2.42
Reasonable	0.067	0.010	3.13	3.41	3.25
Reliable	0.040	0.013	3.38	3.71	3.46
Resilient	0.047	0.011	3.50	3.79	3.79
Responsible	0.001	0.009	3.64	3.96	3.47
Risk taker	0.029	0.013	3.54	3.21	3.33
Role model	0.002	0.010	3.48	3.88	3.01
Ruthless	0.005	0.023	2.83	2.33	2.51
Saintly	0.001	0.011	2.30	2.72	2.28
Samaritan	0.003	0.009	3.12	3.50	2.98
Savvy	0.080	0.009	3.36	3.61	3.45
Selfish	0.010	0.020	2.61	2.17	2.74
Sensitive	0.016	0.018	2.82	3.22	3.19

CAB-Significant for Leader Gender	*p*	η_p^2	Male	Female	NonLeader
Sneaky	0.000	0.009	2.34	1.97	2.40
Sociable	0.024	0.015	3.72	4.00	4.00
Socially-conscious	0.001	0.033	3.39	3.90	3.28
Special	0.004	0.008	2.99	3.37	3.00
Steadfast	0.068	0.003	3.47	3.68	3.40
Strong	0.070	0.008	3.84	4.07	3.34
Stubborn	0.022	0.015	2.77	3.15	3.37
Stylish	0.003	0.024	3.07	3.50	2.83
Suave	0.016	0.018	3.41	3.03	2.83
Supportive	0.058	0.010	3.17	3.46	3.45
Sweet	0.000	0.041	2.37	2.96	2.90
Tactful	0.002	0.028	3.08	3.56	3.24
Talented	0.015	0.018	3.43	3.77	3.39
Task-Oriented	0.019	0.016	3.53	3.84	3.60
Thoughtful	0.000	0.023	3.32	3.81	3.31
Trustworthy	0.002	0.007	3.39	3.70	3.18
Understanding	0.000	0.045	3.17	3.76	3.23
Unfair	0.016	0.004	2.12	1.90	2.10
Unique	0.003	0.026	3.15	3.61	3.20
Unprofessional	0.033	0.005	1.97	1.72	2.08
Uplifting	0.001	0.037	2.94	3.51	3.31
Vain	0.057	0.011	2.79	2.45	2.61
Value-oriented	0.006	0.008	3.58	3.92	3.12
Vibrant	0.001	0.033	3.09	3.57	3.39
Vivacious	0.024	0.015	3.06	3.41	2.89
Underappreciated	0.001	0.036	2.46	3.09	3.29

Note: *N* range from 60-110, yellow indicates $p < .05$, green indicates a trend from $p <.05$-.10.

Table 7.
Study 1, Significant Interaction of the Leader Race and Gender on the CABs.

CAB-Significant at Interaction	*p*	η_P^2	H-male	H-female	W-male	W-female	B-male	B-female
Accommodating	0.05	0.016	3.06	3.33	2.96	3.08	3.72	3.22
Adaptable	0.04	0.019	3.29	3.68	3.82	3.63	3.18	3.88
Ambitious	0.00	0.032	4.12	4.04	3.57	4.29	4.13	3.73
Appreciative	0.02	0.023	3.62	4.00	2.88	3.61	3.60	3.35
Articulate	0.05	0.005	3.40	3.68	3.93	4.09	3.87	3.61
Authoritarian	0.06	0.016	3.28	2.50	3.59	3.24	3.27	3.36
Blunt	0.04	0.019	3.13	3.78	3.75	3.39	3.13	3.50
Boastful	0.01	0.025	2.86	2.45	3.38	2.53	2.68	3.05
Boisterous	0.01	0.007	2.92	2.38	2.58	2.57	3.53	3.14
Brave	0.01	0.028	3.12	3.69	3.71	3.42	3.79	3.21
Cheerful	0.01	0.027	2.90	3.85	3.24	3.14	3.24	3.50
Collaborative	0.05	0.016	3.14	3.94	3.17	3.71	3.50	3.45
Committed	0.00	0.047	3.79	4.20	3.41	4.38	4.11	3.92
Communicator	0.06	0.015	3.56	3.71	3.82	4.13	4.12	3.68
Compassionate	0.00	0.014	3.48	3.53	2.91	3.89	3.61	3.77
Competent	0.01	0.026	3.43	3.44	3.50	4.29	3.82	3.53
Comprehensible	0.08	0.015	3.65	3.21	3.43	3.78	3.47	3.56
Concerned	0.00	0.040	3.75	3.69	2.96	4.00	3.19	3.00
Confident	0.00	0.032	3.57	4.14	4.23	3.83	3.67	4.09
Connected	0.00	0.050	3.13	4.05	3.92	3.44	3.55	3.17
Conservative	0.00	0.014	2.65	2.94	3.65	2.95	2.38	2.39
Considerate	0.00	0.014	3.58	3.50	3.07	3.89	3.58	3.59
Corrupt	0.08	0.005	2.39	1.92	2.67	1.61	2.13	1.72
Courageous	0.07	0.004	3.36	3.71	3.24	3.75	3.75	3.73
Cranky	0.07	0.016	2.00	2.25	2.50	2.00	2.00	2.08
Cultural	0.00	0.031	3.53	3.90	2.83	3.67	3.64	3.43
Determined	0.04	0.017	3.58	3.89	3.92	4.43	4.14	3.86
Difficult	0.01	0.029	2.65	2.57	3.08	2.57	2.30	3.08
Dignity	0.05	0.006	3.61	3.87	3.12	3.90	3.70	3.81
Diplomatic	0.03	0.019	2.86	3.63	3.46	3.75	3.56	3.25
Dishonest	0.03	0.021	2.77	1.88	2.92	2.06	2.16	2.17
Dishonorable	0.04	0.006	2.02	1.79	2.32	1.45	2.00	1.78
Diverse	0.00	0.048	3.10	3.53	2.46	3.56	3.74	3.41
Efficient	0.00	0.035	2.67	4.00	3.79	4.05	3.60	3.50
Elegant	0.00	0.045	2.69	3.80	3.41	3.43	2.68	2.43

CAB-Significant at Interaction	*p*	η_P^2	H-male	H-female	W-male	W-female	B-male	B-female
Emotional	0.07	0.015	2.95	3.74	2.38	2.67	3.22	3.22
Empathetic	0.00	0.009	3.15	3.57	2.87	3.77	3.33	3.43
Endearing	0.09	0.014	3.47	3.89	3.50	4.09	3.77	3.87
Fair	0.05	0.004	3.48	3.65	3.42	3.78	3.61	3.43
Famous	0.02	0.025	2.60	2.95	2.89	2.60	3.28	2.29
Fashionable	0.01	0.028	3.13	3.71	2.39	3.61	3.45	3.53
Fearful	0.08	0.005	1.96	2.19	2.43	2.03	2.27	1.95
Flexible	0.06	0.006	3.39	3.54	3.16	3.67	3.40	3.24
Fluent	0.09	0.002	3.33	3.87	3.30	4.00	3.46	3.44
Frugal	0.03	0.021	2.68	3.35	3.04	3.10	2.89	2.64
Gentle	0.08	0.015	3.46	2.77	2.87	2.93	2.90	2.95
Genuine	0.00	0.041	3.31	3.90	3.05	3.82	3.67	3.13
Glamorous	0.02	0.022	2.21	3.41	2.68	3.07	2.69	2.93
Greedy	0.02	0.023	2.81	1.82	3.26	2.44	2.17	2.28
Grounded	0.09	0.014	2.78	3.14	2.84	3.58	3.37	3.29
Gruff	0.02	0.024	2.24	2.20	2.48	1.94	2.24	2.74
Handy	0.03	0.023	2.65	2.85	2.65	2.69	3.29	2.55
Harmonious	0.07	0.005	3.32	3.46	2.97	3.71	3.24	3.47
Heartless	0.04	0.018	2.15	1.71	2.30	1.83	2.09	2.50
Helpful	0.02	0.006	3.43	3.76	3.18	3.89	3.66	3.72
Honest	0.00	0.039	3.08	3.70	2.92	3.96	3.45	3.12
Humble	0.01	0.007	2.98	3.38	2.65	3.27	3.18	3.08
Informal	0.04	0.018	3.13	2.77	2.46	2.94	2.25	2.68
Innovative	0.02	0.006	3.30	3.56	3.30	3.78	3.61	3.47
Inspirational	0.04	0.005	3.30	3.87	3.05	3.70	3.64	3.72
Inspiring	0.00	0.052	2.85	3.94	3.56	3.65	3.52	3.09
Intense	0.05	0.006	3.71	3.58	3.51	3.39	3.44	3.93
Intimidating	0.00	0.036	2.31	2.79	3.25	2.65	2.50	3.13
Inventive	0.00	0.047	2.89	3.65	3.35	3.67	3.58	2.86
Irresponsible	0.10	0.015	2.32	1.93	2.25	1.69	1.89	2.14
Judged	0.09	0.013	3.33	3.60	2.77	3.33	3.69	3.42
Judgmental	0.01	0.010	2.77	2.89	3.33	2.63	2.82	3.05
Likeable	0.00	0.031	3.50	4.21	3.50	3.81	3.50	3.16
Listener	0.00	0.033	3.19	3.48	3.09	3.82	3.74	3.14
Low Income	0.02	0.022	2.50	3.07	1.52	1.53	2.52	2.10
Manly	0.00	0.037	3.69	1.77	3.65	1.90	3.47	2.77

CAB-Significant at Interaction	*p*	η_P^2	H-male	H-female	W-male	W-female	B-male	B-female
Meticulous	0.05	0.017	3.33	3.16	3.36	4.11	2.89	3.56
Mindful	0.06	0.004	3.46	3.79	3.15	3.73	3.50	3.57
Modest	0.00	0.067	3.25	3.38	2.44	3.00	3.21	2.06
Motivated	0.00	0.047	3.15	4.42	3.95	4.18	3.95	3.79
Nurturing	0.00	0.051	2.83	3.65	2.40	3.45	3.28	2.82
Observant	0.00	0.034	3.27	3.63	3.66	4.29	3.83	3.35
Older	0.08	0.015	2.76	3.11	3.67	3.44	3.12	2.67
Optimistic	0.03	0.005	3.53	3.92	3.58	3.96	3.66	3.57
Passionate	0.01	0.007	3.79	4.05	3.19	3.94	3.98	4.05
Patient	0.00	0.011	3.09	3.48	3.21	3.67	3.41	3.02
Peacemaker	0.04	0.017	3.33	3.16	3.20	3.76	3.19	2.96
Perfectionist	0.02	0.024	2.47	3.47	3.59	3.52	3.00	3.31
Persistent	0.01	0.025	3.16	3.87	3.85	4.07	3.67	3.41
Philanthropic	0.02	0.023	2.93	3.17	2.88	3.86	3.11	3.09
Playful	0.05	0.017	2.94	3.00	2.30	2.83	2.79	2.42
Polished	0.03	0.019	3.35	3.38	3.64	3.90	3.83	3.23
Power-hungry	0.05	0.017	3.25	2.59	3.09	3.21	2.63	2.83
Practical	0.03	0.021	3.42	3.27	3.61	4.17	3.50	3.16
Professional	0.00	0.051	2.95	4.00	4.29	3.94	3.82	3.73
Progressive	0.00	0.010	3.38	3.78	2.96	3.88	3.67	3.78
Quiet	0.00	0.035	2.74	1.93	2.00	2.47	1.96	1.91
Rare	0.00	0.011	2.86	3.26	1.98	3.19	3.10	3.24
Relaxed	0.00	0.051	2.69	3.14	2.91	3.35	3.38	2.50
Religious	0.05	0.005	3.68	3.75	3.14	2.85	3.28	3.54
Reserved	0.02	0.025	2.35	2.94	2.87	2.53	2.29	1.95
Respected	0.02	0.023	3.52	3.86	4.05	3.58	3.08	3.65
Respectful	0.05	0.004	3.76	3.72	3.50	3.90	3.66	3.58
Responsible	0.04	0.005	3.76	3.80	3.58	4.22	3.59	3.86
Savvy	0.02	0.023	3.27	3.88	3.33	3.85	3.47	3.11
Sensitive	0.03	0.021	2.89	3.29	2.52	3.45	3.05	2.93
Serious	0.00	0.038	2.73	3.27	4.08	3.65	4.10	3.48
Sophisticated	0.10	0.013	3.12	3.50	3.55	3.70	3.44	3.10
Strict	0.03	0.019	2.42	3.04	3.33	3.00	3.13	3.28
Stubborn	0.01	0.027	2.85	3.27	2.92	2.67	2.55	3.52
Studious	0.06	0.018	3.06	3.32	3.30	3.74	3.53	3.00
Stylish	0.05	0.016	2.87	3.71	3.31	3.78	3.04	3.00

CAB-Significant at Interaction	*p*	η_P^2	H-male	H-female	W-male	W-female	B-male	B-female
Superficial	0.01	0.026	2.58	2.19	2.79	2.00	2.09	2.55
Supportive	0.03	0.020	3.08	3.44	2.92	3.64	3.50	3.29
Sweet	0.07	0.016	2.52	3.63	2.26	2.60	2.33	2.65
Sympathetic	0.09	0.014	3.55	3.75	3.17	3.41	3.40	2.94
Terrifying	0.00	0.067	2.00	1.53	2.15	1.39	1.92	2.74
Thoughtful	0.04	0.005	3.48	3.93	3.10	3.87	3.39	3.62
Tolerant	0.02	0.022	3.20	3.30	2.62	3.35	3.26	3.05
Tough	0.09	0.013	3.28	3.57	3.65	3.88	3.48	3.05
Traditional	0.01	0.026	3.00	3.21	3.44	3.00	2.78	3.44
Trendsetter	0.00	0.036	3.13	3.41	2.71	3.23	3.45	2.62
Uncompromising	0.04	0.018	2.57	2.89	3.31	2.67	2.72	2.85
Underdog	0.07	0.016	3.14	3.27	1.70	2.37	3.41	3.23
Understanding	0.01	0.025	3.28	3.85	2.79	3.90	3.44	3.53
Unfair	0.01	0.007	2.09	1.97	2.43	1.82	1.85	1.92
Unique	0.00	0.031	3.07	4.17	3.00	3.50	3.36	3.16
Visionary	0.00	0.035	3.31	3.89	3.41	3.95	3.63	3.00
Weary	0.00	0.079	2.85	1.88	2.24	2.15	1.96	2.78
Well Dressed	0.00	0.100	2.73	3.86	3.73	4.29	3.96	2.94
Well-adjusted	0.05	0.017	3.64	3.47	3.21	3.79	3.43	3.44
Wrong	0.02	0.007	1.66	1.75	2.39	1.75	1.87	1.84

Note: *N* range from 60-110, yellow indicates $p < .05$, green indicates a trend from $p < .05$-.10.

Table 8.
Study 1, Significant Main Effects on the CABs for the Leader vs. NonLeader Condition.

CAB-Sig at Lead/Non	*p*	η_P^2	Leader	NonLeader
Accessible	0.07	0.008	3.47	3.25
Activist	0.00	0.037	3.41	2.94
Agreeable	0.04	0.012	3.45	3.21
Ambitious	0.00	0.024	3.95	3.61
Appreciative	0.02	0.015	3.48	3.19
Articulate	0.00	0.026	3.78	3.41
Artistic	0.00	0.065	2.74	3.43
Assertive	0.00	0.076	3.87	3.16
Attentive	0.00	0.027	3.44	3.84
Authentic	0.00	0.016	3.56	3.23
Authoritarian	0.00	0.076	3.27	2.44
Blunt	0.00	0.079	3.44	2.69
Boisterous	0.00	0.040	2.85	3.35
Bold	0.06	0.009	3.69	3.47
Boring	0.01	0.019	2.14	1.79
Brave	0.03	0.014	3.48	3.20
Capable	0.05	0.011	3.79	3.55
Care free	0.03	0.013	2.54	2.83
Charismatic	0.01	0.020	3.88	3.57
Charitable	0.00	0.035	3.50	3.05
Closed Minded	0.00	0.031	2.64	2.14
Cold	0.05	0.010	2.33	2.08
Collective	0.02	0.005	3.35	3.19
Committed	0.08	0.009	3.90	4.09
Communal	0.05	0.011	2.94	3.19
Communicator	0.05	0.011	3.84	3.61
Compassionate	0.00	0.014	3.52	3.23
Comprehensible	0.00	0.025	3.53	3.18
Confident	0.00	0.043	3.94	3.50
Conscientious	0.01	0.021	3.46	3.10
Conservative	0.02	0.004	2.86	2.70
Considerate	0.00	0.015	3.53	3.26
Consistent	0.01	0.006	3.64	3.46
Conversational	0.02	0.015	3.69	3.41
Courageous	0.00	0.016	3.58	3.28
Crafty	0.01	0.019	3.00	2.61

CAB-Sig at Lead/Non	*p*	η_P^2	Leader	NonLeader
Cranky	0.03	0.013	2.14	2.41
Creative	0.05	0.010	3.34	3.58
Crooked	0.01	0.007	2.00	2.21
Cultural	0.01	0.021	3.48	3.14
Cultured	0.00	0.047	3.45	2.90
Curious	0.03	0.016	3.06	3.38
Decisive	0.00	0.021	3.74	3.40
Defiant	0.07	0.010	2.96	2.67
Dependable	0.00	0.018	3.66	3.35
Determined	0.08	0.008	3.95	3.76
Dignity	0.00	0.045	3.67	3.17
Diplomatic	0.03	0.012	3.42	3.15
Direct	0.00	0.010	3.78	3.56
Dirty	0.00	0.046	1.73	2.25
Disciplined Practitioner	0.10	0.007	3.58	3.39
Dishonorable	0.00	0.011	1.89	2.14
Dominating	0.00	0.030	3.17	2.71
Dramatic	0.02	0.016	3.13	3.47
Earthy	0.00	0.029	2.68	3.12
Educated	0.00	0.030	3.87	3.47
Elected	0.00	0.166	3.36	2.19
Elegant	0.00	0.032	3.12	2.67
Empowering	0.00	0.081	3.49	2.79
Endearing	0.01	0.019	3.12	2.76
Entitled	0.69	0.000	2.76	2.82
Esteemed	0.00	0.029	3.63	3.24
Ethical	0.00	0.051	3.68	3.11
Even keeled	0.01	0.180	3.35	3.03
Exemplary	0.00	0.041	3.457	2.970
Experienced	0.01	0.005	3.70	3.85
Fair	0.00	0.033	3.56	3.15
Faithful	0.00	0.057	3.51	2.93
Fake	0.00	0.021	2.16	2.58
Family-Oriented	0.00	0.026	3.57	3.16
Famous	0.00	0.028	2.80	2.32
Fashionable	0.00	0.045	3.31	2.77
Feminist	0.00	0.031	2.71	2.18

CAB-Sig at Lead/Non	*p*	η_P^2	Leader	NonLeader
Fierce	0.00	0.034	3.25	2.75
Fluent	0.00	0.028	3.56	3.17
Forceful	0.00	0.043	3.34	2.83
Forgiving	0.07	0.008	3.47	3.25
Frugal	0.00	0.025	2.96	2.59
Funny	0.10	0.002	3.19	3.30
Gruff	0.00	0.043	2.34	2.88
Handy	0.00	0.078	2.76	3.51
Harmonious	0.00	0.010	3.36	3.13
Heartless	0.03	0.004	3.61	3.48
Honorable	0.00	0.050	3.68	3.12
Idealistic	0.01	0.006	3.44	3.27
Improper	0.00	0.016	2.03	2.35
Independent	0.00	0.009	3.75	3.54
Influential	0.00	0.042	3.56	3.00
Informal	0.07	0.009	2.68	2.93
Innocent	0.01	0.006	2.59	2.40
Innovative	0.00	0.014	3.51	3.24
Inspirational	0.00	0.025	3.54	3.15
Inspiring	0.00	0.032	3.43	2.98
Instrumental	0.09	0.008	3.08	2.85
Integrity	0.07	0.009	3.53	3.29
Intelligent	0.00	0.037	3.89	3.46
Intuitive	0.05	0.011	3.57	3.30
Judged	0.00	0.062	3.37	2.65
Just	0.00	0.063	3.54	2.93
Knowledgeable	0.00	0.016	3.90	3.62
Law-abiding	0.00	0.053	3.71	3.17
Meticulous	0.08	0.008	3.40	3.17
Mindful	0.00	0.013	3.52	3.27
Modest	0.00	0.035	2.95	2.47
Moral	0.00	0.029	3.45	3.04
Musical	0.04	0.011	2.55	2.85
Noble	0.00	0.035	3.33	2.86
Nurturing	0.07	0.009	3.06	2.81
Older	0.01	0.021	3.15	2.81
Open-minded	0.08	0.002	3.41	3.30
Optimistic	0.00	0.012	3.70	3.46

CAB-Sig at Lead/Non	*p*	η_P^2	Leader	NonLeader
Orderly	0.00	0.026	3.72	3.35
Organized	0.00	0.010	3.72	3.51
Partier	0.00	0.097	2.10	2.97
Passionate	0.04	0.003	3.83	3.70
Perceptive	0.09	0.003	3.64	3.52
Performer	0.00	0.041	3.20	3.73
Persistent	0.09	0.008	3.66	3.86
Persuasive	0.00	0.040	3.66	3.19
Philanthropic	0.00	0.022	3.13	2.76
Polished	0.01	0.020	3.55	3.20
Poor	0.04	0.012	2.07	2.34
Power-hungry	0.02	0.017	2.94	2.56
Powerful	0.00	0.070	3.68	3.06
Pragmatic	0.00	0.009	3.33	3.12
Progressive	0.00	0.012	3.56	3.30
Proper	0.00	0.051	3.56	3.03
Proud	0.01	0.006	3.90	3.73
Rare	0.00	0.035	2.94	2.42
Rational	0.00	0.034	3.55	3.15
Religious	0.00	0.104	3.35	2.54
Respectable	0.07	0.008	3.77	3.55
Respected	0.01	0.019	3.64	3.31
Respectful	0.00	0.033	3.69	3.28
Responsible	0.00	0.018	3.79	3.47
Righteous	0.00	0.026	3.33	2.94
Role model	0.00	0.068	3.68	3.01
Saintly	0.01	0.007	2.50	2.28
Samaritan	0.00	0.016	3.31	2.98
Scrupulous	0.00	0.008	3.16	2.95
Selfish	0.03	0.014	2.40	2.74
Serious	0.06	0.010	3.60	3.36
Sharp	0.10	0.008	3.65	3.44
Skilled	0.02	0.018	3.80	4.09
Sneaky	0.00	0.008	2.17	2.40
Socially-conscious	0.00	0.022	3.62	3.28
Sophisticated	0.00	0.040	3.42	2.93
Special	0.03	0.005	3.18	3.00
Spiritual	0.00	0.086	3.45	2.69

CAB-Sig at Lead/Non	*p*	η_P^2	Leader	NonLeader
Stable	0.00	0.032	3.50	3.08
Steadfast	0.01	0.006	3.58	3.40
Stern	0.00	0.031	3.12	2.66
Stressed	0.00	0.049	2.78	3.35
Strict	0.00	0.026	3.04	2.66
Strong	0.00	0.067	3.95	3.34
Stubborn	0.01	0.017	3.02	3.37
Studious	0.01	0.020	3.35	2.98
Stylish	0.00	0.035	3.30	2.83
Suave	0.01	0.022	3.21	2.83
Successful	0.00	0.048	3.83	3.33
Superficial	0.02	0.016	2.36	2.73
Sweet	0.06	0.011	2.63	2.90
Talented	0.10	0.008	3.60	3.39
Terrifying	0.01	0.018	2.03	1.68
Thoughtful	0.00	0.013	3.55	3.31
Trendsetter	0.04	0.012	3.12	2.83
Trustworthy	0.00	0.022	3.54	3.18
Underappreciated	0.00	0.040	2.72	3.29
Uneducated	0.00	0.026	1.87	2.30
Unflappable	0.06	0.010	3.01	3.27
Unhealthy	0.02	0.016	1.89	2.18
Unprofessional	0.00	0.011	1.84	2.08
Value-oriented	0.00	0.065	3.74	3.12
Vigilant	0.02	0.015	3.54	3.24
Visionary	0.00	0.080	3.53	2.75
Vivacious	0.02	0.017	3.21	2.89
Wealthy	0.00	0.048	3.14	2.56
Weary	0.05	0.012	2.27	2.51
Well Dressed	0.00	0.066	3.67	3.02
Well spoken	0.00	0.015	3.82	3.54
Well-adjusted	0.00	0.033	3.48	3.07
Wrong	0.09	0.003	1.88	2.00

Note: *N* range from 60-110, yellow indicates $p < .05$, green indicates a trend from p <.05-.10. Bright yellow indicates which condition mean is higher.

Table 9.
Study 1, Nonsignificant CABs for the Leader Conditions and the Leader/NonLeader Conditions.

NonSignificant CABs		Leader/NonLeader NonSignificant CABS				
Audacious	Resourceful	Accommodating	Diligent	Honest	Playful	Unfair
Aware	Scrupulous	Active	Disciplined	Humble	Pliable	Unique
Belligerent	Stern	Adaptable	Dishonest	Humorous	Practical	Unpredictable
Benevolent	Stressed	Aggressive	Diverse	Impolite	Prepared	Unscrupulous
Boring	Talkative	Alert	Dutiful	Imposter	Privileged	Unskilled
Caring	Tidy	Anxious	Effective	Impressive	Professional	Unusual
Charming	Transparent	Approachable	Efficient	Industrious	Prompt	Uplifting
Cold	Unflappable	Arrogant	Egotistical	Insistent	Punctual	Vain
Collective	Unhealthy	Attractive	Emotional	Intense	Quick thinking	Vibrant
Common sense	Unpredictable	Audacious	Empathetic	Intimidating	Quiet	Volatile
Conscientious	Unscrupulous	Aware	Energetic	Intolerant	Reasonable	Warm
Defiant	Unskilled	Belligerent	Engaging	Introspective	Relaxed	Witty
Deliberate	Vigilant	Benevolent	Enigmatic	Inventive	Reliable	
Direct	Volatile	Boastful	Entertaining	Involved	Reserved	
Dramatic	Warm	Calm	Enthusiastic	Irresponsible	Resilient	
Earthy	Well spoken	Caring	Extrovert	Joyful	Resourceful	
Empowering	Unpredictable	Cautious	Failure	Judgmental	Risk taker	
Enigmatic		Challenging	Fanatical	Kind	Ruthless	
Entertaining		Charming	Fascinating	Lazy	Safety-Conscious	
Esteemed		Cheerful	Fearful	Liberal	Sarcastic	
Even keeled		Collaborative	Feisty	Likeable	Savvy	
Extrovert		Comfortable	Feminine	Listener	Sensitive	
Failure		Comical	Flexible	Listens	Simple	
Feisty		Common sense	Focused	Low Income	Sociable	
Foolish		Communicative	Foolish	Manager	Strategic	
Friendly		Competent	Formidable	Manly	Supportive	
Fun		Competitive	Friendly	Masculine	Sympathetic	
Hardworking		Complicated	Fun	Menial	Tactful	
Harsh		Concerned	Generous	Money oriented	Talkative	
Hierarchal		Connected	Gentle	Moody	Task-Oriented	
Improper		Cool	Genuine	Motivated	Tidy	
Industrious		Cooperative	Glamorous	Obnoxious	Tolerant	
Intolerant		Corrupt	Greedy	Observant	Tough	
Introspective		Courteous	Grounded	Opinionated	Traditional	
Lazy		Daring	Happy	Outgoing	Transparent	
Listens		Deceitful	Hard worker	Overworked	Uncompromising	
Menial		Dedicated	Hardworking	Patient	Uncultured	
Musical		Deliberate	Harsh	Peacemaker	Underachiever	
Pliable		Detail Oriented	Helpful	Perfectionist	Underdog	
Proud		Difficult	Hierarchal	Persuadable	Understanding	

Table 10.
Study 1, Final CABs used in the Spearman-Brown Prophecy Formula

Agentic CABs		Communal CABs		Religious CABs	
Ambitious	Inspirational	Accommodating	Harmonious	Appreciative	Judgmental
Adaptable	Inspiring	Adaptable	Helpful	Collaborative	Modest
Articulate	Inventive	Appreciative	Humble	Committed	Nurturing
Competent	Meticulous	Cheerful	Likeable	Compassionate	Passionate
Confident	Mindful	Collaborative	Listener	Concerned	Persistent
Committed	Motivated	Compassionate	Mindful	Connected	Power-hungry
Comprehensible	Observant	Communicator	Motivated	Conservative	Religious
Connected	Perfectionist	Connected	Nurturing	Considerate	Reserved
Determined	Persistent	Considerate	Peacemaker	Dignity	Respected
Difficult	Practical	Cultural	Philanthropic	Fearful	Respectful
Diplomatic	Professional	Dignity	Respected	Gentle	Sensitive
Efficient	Respected	Diplomatic	Respectful	Harmonious	Strict
Fair	Savvy	Diverse	Responsible	Helpful	Stubborn
Fluent	Serious	Emotional	Sensitive	Honest	Supportive
Genuine	Sophisticated	Empathetic	Supportive	Humble	Traditional
Grounded	Studious	Fair	Sweet	Inspirational	Understanding
Innovative	Thoughtful	Fluent	Tolerant	Inspiring	
	Visionary	Gentle	Understanding	Intense	

Table 11.
Study 1, Agentic CABs ANOVA

	df	*F*	*p*	η_P^2
Between Groups	5	9.845	0.00**	.027
Within Groups	1284			
Total	1289			

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$

Table 12.
Study 1, Communal CABs ANOVA

	df	*F*	*p*	η_P^2
Between Groups	5	12.761	0.00**	.039
Within Groups	1286			
Total	1291			

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$

Table 13.
Study 1, Religious CABs ANOVA

	df	*F*	*p*	η_P^2
Between Groups	5	12.097	0.00**	.034
Within Groups	1286			
Total	1291			

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$

Table 14.
Study 2 Final 40 CABs

1. Ambitious
2. Approachable
3. Articulate
4. Assertive
5. Bold [B]
6. Conversational
7. Courageous
8. Decisive
9. Dependable
10. Has Dignity
11. Diligent[D]
12. Disciplined Practitioner
13. Educated
14. Extrovert
15. Ethical[D]
16. Fair
17. Family-Oriented
18. Honorable
19. Independent[D]
20. Influential
21. Intelligent
22. Law-abiding
23. Likeable[A]
24. Leader
25. Optimistic
26. Orderly
27. Persuasive[C]
28. Powerful
29. Proper[D]
30. Respectful
31. Responsible
32. Role model
33. Sharp[C]
34. Strong
35. Successful
36. Thoughtful[D]
37. Trustworthy
38. Vigilant[A]
39. Value-oriented
40. Well Dressed[C]

Note. A = Blacks, B = White, C= Hispanic, D = Male, E = Female

Table 15. *CAB Exploratory Factor Analysis for Study 2.*

Factors	*Loading*	*CABs*
Leader CABs	.755	Intelligent
	.741	Responsible
	.729	Leader
	.706	Dependable
	.674	Successful
	.652	Diligent
	.643	Ambitious
	.640	Articulate
	.633	Decisive
	.610	Disciplined Practitioner
	.594	Sharp
	.586	Role model
	.559	Orderly
Communal CABs	.725	Law-abiding
	.685	Respectful
	.651	Vigilant
	.637	Thoughtful
	.630	Family-Oriented
	.627	Fair
	.610	Optimistic
	.586	Honorable
	.567	Approachable
Power CABs	.728	Powerful
	.641	Bold
	.607	Influential
	.595	Assertive

Table 16. *Confirmatory Factor Analysis for Study 2.*

Factors	*Loading*	*Items*
Ethical Leadership	0.79	Conducts his/her personal life in an ethical manner.
	0.79	Defines success not just by results but also by the way they are obtained.
	0.77	Listens to what employees have to say.
	0.66	Disciplines employees who violate ethical standards.
	0.85	Makes fair and balanced decisions.
	0.83	Can be trusted.
	0.71	Discusses business ethics or values with employees.
	0.84	Sets an example of how to do things the right way in terms of ethics.
	0.85	Has the best interest of employees in mind.
	0.73	When making decisions asks, "What is the right thing to do?"
General Leadership Impression	0.76	A high degree of leadership ability.
	0.84	How willing are you to choose the leader as a formal leader.
	0.39	How typical the leader was of a leader.
	0.72	What extent the leader engaged in leader behavior.
	0.85	The degree to which the leader fit the image of a leader.
Leader Effectiveness	0.76	How effective is This Leader at achieving work objectives?
	0.84	How effective is This Leader at achieving the goals and values of the organization?
	0.39	How effective is This Leader in general?

Table 17.
Study 2, *Means, standard deviations, and bivariate correlations among the variables*

	Mean	SD	1	2	3	4	8	9	10	11	12	15	16	17	18
1. LeaderCABs	4.17	0.67	*.99*												
2.RelationalCABs	3.85	0.69	.75**	*.97*											
3. PowerCABs	3.79	0.76	.70**	*.63***	*.99*										
4. Ethical Leadership	5.60	0.85	.67**	.67**	.53**	(.93)									
5. Effectiveness	4.43	0.63	.71**	.50**	.45**	.65**	(.87)								
6. General Leader Impressions	4.10	0.59	.69**	.59**	.49**	.73**	.73**	(.84)							
7. Promotion Recommendation	5.94	1.39	.47**	.31**	.29**	.41**	.50**	.50**							
8. Enjoy As Peer	3.97	0.90	.48**	.47**	.31**	.60**	.51**	.53**	.41**						
9. Enjoy As Subordinate	3.84	0.93	.44**	.42**	.27**	.57**	.47**	.51**	.52**	.72**					
10. Religious	2.23	0.87	-.31**	-.14*	-.09	-.21**	-.31**	-.26**	-.23**	-.19**	-.18**	(.84)			
11. Classism	2.51	0.94	-.27**	-.13	-.11	-.11	-.25**	-.20**	-.26**	-.15*	-.16*	.69**	(.91)		
12. Racism	2.00	0.92	-.40**	-.24**	-.14*	-.24**	-.42**	-.29**	-.31**	-.22**	-.24**	.76**	.68**	(.92)	
18. Sexism	1.97	0.97	-.40**	-.20**	-.16*	-.29**	-.42**	-.34**	-.29**	-.21**	-.24**	.76**	.63**	.816**	(.87)

Note. $N = 238$ for all variables. Cronbach's alphas are reported in the parentheses on the diagonal, Spearman-Brown reliabilities are italicized.
† $p < .10$. * $p < .05$. ** $p < .01$.

Table 18.
Study 2, LeaderCABs ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	0.71	.49	.007
Leader Gender	1	0.15	.70	.001
P.Gender	1	6.21	.01**	.029
P.Race	2	1.08	.34	.010
Leader Race * Leader Gender	2	0.33	.72	.003
Leader Race * P.Gender	2	2.64	.07†	.025
Leader Race * P.Race	4	2.07	.09†	.038
Leader Gender * P.Gender	1	4.92	.03**	.023
Leader Gender * P.Race	2	0.89	.41	.009
P.Gender * P.Race	2	2.13	.12	.020
Leader Race * Leader Gender * P.Gender	2	0.97	.38	.009
Leader Race * Leader Gender * P.Race	4	1.21	.31	.023
Leader Race * P.Gender * P.Race	3	3.94	.01**	.054
Leader Gender * P.Gender * P.Race	1	1.54	.22	.007
Leader Race * Leader Gender * P.Gender * P.Race	1	1.86	.17	.009

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .202 (Adjusted R Squared = .087). P.Gender = Participant Gender, P.Race = Participant Race.

Table 19.
Study 2, RelationalCABs ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	1.15	.31	.01
Leader Gender	1	0.11	.73	.00
P.Gender	1	6.94	.00**	.03
P.Race	2	0.23	.79	.00
Leader Race * Leader Gender	2	0.88	.41	.01
Leader Race * P.Gender	2	2.15	.11	.02
Leader Race * P.Race	4	1.28	.27	.02
Leader Gender * P.Gender	1	1.10	.29	.01
Leader Gender * P.Race	2	0.62	.53	.01
P.Gender * P.Race	2	1.47	.23	.01
Leader Race * Leader Gender * P.Gender	2	0.94	.39	.01
Leader Race * Leader Gender * P.Race	4	1.65	.16	.03
Leader Race * P.Gender * P.Race	3	4.17	.00**	.06
Leader Gender * P.Gender * P.Race	1	0.00	.98	.00
Leader Race * Leader Gender * P.Gender * P.Race	1	0.27	.60	.00

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$. R Squared = .194 (Adjusted R Squared = .077). P.Gender = Participant Gender, P.Race = Participant Race.

Table 20.
Study 2, PowerCABs ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	1.49	.23	.014
Leader Gender	1	0.00	.96	.000
P.Gender	1	3.84	.05*	.018
P.Race	2	0.05	.95	.000
Leader Race * Leader Gender	2	0.52	.60	.005
Leader Race * P.Gender	2	1.08	.34	.010
Leader Race * P.Race	4	1.66	.16	.031
Leader Gender * P.Gender	1	0.03	.87	.000
Leader Gender * P.Race	2	0.18	.84	.002
P.Gender * P.Race	2	0.35	.70	.003
Leader Race * Leader Gender * P.Gender	2	1.33	.27	.013
Leader Race * Leader Gender * P.Race	4	0.76	.55	.015
Leader Race * P.Gender * P.Race	3	3.03	.03*	.042
Leader Gender * P.Gender * P.Race	1	1.36	.25	.007
Leader Race * Leader Gender * P.Gender * P.Race	1	0.09	.76	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$. R Squared = .183 (Adjusted R Squared = .064). P.Gender = Participant Gender, P.Race = Participant Race.

Table 21.
Study 2, Ethical Leadership ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	1.11	.33	.011
Leader Gender	1	0.24	.63	.001
P.Gender	1	3.62	.06†	.017
P.Race	2	1.62	.20	.015
Leader Race * Leader Gender	2	0.14	.87	.001
Leader Race * P.Gender	2	2.34	.10	.022
Leader Race * P.Race	4	1.22	.30	.023
Leader Gender * P.Gender	1	0.25	.61	.001
Leader Gender * P.Race	2	0.69	.50	.007
P.Gender * P.Race	2	0.75	.47	.007
Leader Race * Leader Gender * P.Gender	2	1.07	.35	.010
Leader Race * Leader Gender * P.Race	4	0.79	.53	.015
Leader Race * P.Gender * P.Race	3	3.32	.02*	.046
Leader Gender * P.Gender * P.Race	1	0.58	.45	.003
Leader Race * Leader Gender * P.Gender * P.Race	1	0.30	.59	.001

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$. R Squared = .166 (Adjusted R Squared = .045). P.Gender = Participant Gender, P.Race = Participant Race.

Table 22.
Study 2, Effectiveness ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	.55	.58	.005
Leader Gender	1	.22	.64	.001
P.Gender	1	8.97	.00**	.042
P.Race	2	2.29	.10	.022
Leader Race * Leader Gender	2	.81	.45	.008
Leader Race * P.Gender	2	2.64	.07†	.025
Leader Race * P.Race	4	2.63	.04**	.048
Leader Gender * P.Gender	1	7.65	.01**	.036
Leader Gender * P.Race	2	.35	.70	.003
P.Gender * P.Race	2	2.20	.11	.021
Leader Race * Leader Gender * P.Gender	2	.61	.54	.006
Leader Race * Leader Gender * P.Race	4	3.27	.01**	.059
Leader Race * P.Gender * P.Race	3	4.69	.00**	.064
Leader Gender * P.Gender * P.Race	1	4.61	.03**	.022
Leader Race * Leader Gender * P.Gender * P.Race	1	.73	.39	.004

Note. N =238 † $p < .10$. * $p < .05$. ** $p < .01$. R Squared = .233 (Adjusted R Squared = .122) P.Gender = Participant Gender, P.Race = Participant Race.

Table 23.
Study 2, General Leader Impressions ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	0.08	.92	.001
Leader Gender	1	0.06	.81	.005
P.Gender	1	4.86	.03*	.059
P.Race	2	0.46	.63	.000
Leader Race * Leader Gender	2	0.09	.92	.003
Leader Race * P.Gender	2	2.29	.10	.001
Leader Race * P.Race	4	0.97	.43	.000
Leader Gender * P.Gender	1	1.20	.27	.022
Leader Gender * P.Race	2	0.72	.49	.000
P.Gender * P.Race	2	0.59	.56	.000
Leader Race * Leader Gender * P.Gender	2	0.26	.77	.002
Leader Race * Leader Gender * P.Race	4	0.66	.62	.000
Leader Race * P.Gender * P.Race	3	1.84	.14	.000
Leader Gender * P.Gender * P.Race	1	0.01	.92	.000
Leader Race * Leader Gender * P.Gender * P.Race	1	0.08	.78	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$. R Squared = .151 (Adjusted R Squared = .028). P.Gender = Participant Gender, P.Race = Participant Race.

Table 24.
Study 2. Recommend for a Promotion ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	4.78	.01**	.044
Leader Gender	1	0.15	.70	.001
P.Gender	2	3.35	.04*	.031
P.Race	1	1.71	.19	.008
Leader Race * Leader Gender	2	0.49	.61	.005
Leader Race * P.Gender	4	1.97	.10	.037
Leader Race * P.Race	2	0.30	.74	.003
Leader Gender * P.Gender	2	0.08	.92	.001
Leader Gender * P.Race	1	2.85	.09†	.014
P.Gender * P.Race	2	0.42	.66	.004
Leader Race * Leader Gender * P.Gender	4	1.01	.40	.019
Leader Race * Leader Gender * P.Race	2	0.13	.88	.001
Leader Race * P.Gender * P.Race	2	0.24	.79	.002
Leader Gender * P.Gender * P.Race	1	0.03	.86	.000
Leader Race * Leader Gender * P.Gender * P.Race	1	0.23	.63	.001

Notes. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .226 (Adjusted R Squared = .117). P.Gender = Participant Gender, P.Race = Participant Race.

Table 25.
Study 2, Enjoy Working With as a Subordinate ANOVA

Source	*df*	*F*	*p*	η_P^2
Leader Race	2	4.25	.02**	.039
Leader Gender	1	0.45	.50	.002
P.Gender	2	1.65	.19	.016
P.Race	1	7.77	.01**	.036
Leader Race * Leader Gender	2	0.21	.81	.002
Leader Race * P.Gender	4	1.12	.35	.021
Leader Race * P.Race	2	2.66	.07†	.025
Leader Gender * P.Gender	2	2.71	.07†	.026
Leader Gender * P.Race	1	0.04	.84	.000
P.Gender * P.Race	2	1.84	.16	.017
Leader Race * Leader Gender * P.Gender	4	0.15	.96	.003
Leader Race * Leader Gender * P.Race	2	0.66	.52	.006
Leader Race * P.Gender * P.Race	3	2.57	.06†	.036
Leader Gender * P.Gender * P.Race	1	0.56	.45	.003
Leader Race * Leader Gender * P.Gender * P.Race	1	0.23	.63	.001

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .173 (Adjusted R Squared = .053). P.Gender = Participant Gender, P.Race = Participant Race.

Table 26.
Study 2, Enjoy Working With as a Peer ANOVA

Source	*df*	*F*	*p*	η_p^2
Leader Race	2	2.45	.09†	.023
Leader Gender	1	0.03	.86	.000
P.Gender	2	0.74	.48	.007
P.Race	1	1.95	.16	.009
Leader Race * Leader Gender	2	0.01	.99	.000
Leader Race * P.Gender	4	0.78	.54	.015
Leader Race * P.Race	2	1.23	.29	.012
Leader Gender * P.Gender	2	2.03	.13	.019
Leader Gender * P.Race	1	0.02	.90	.000
P.Gender * P.Race	2	0.72	.49	.007
Leader Race * Leader Gender * P.Gender	4	0.49	.74	.009
Leader Race * Leader Gender * P.Race	2	0.25	.78	.002
Leader Race * P.Gender * P.Race	3	2.79	.04*	.039
Leader Gender * P.Gender * P.Race	1	0.32	.57	.002
Leader Race * Leader Gender * P.Gender * P.Race	1	0.00	.95	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .160 (Adjusted R Squared = .038) P.Gender = Participant Gender, P.Race = Participant Race.

Table 27.
Study 2, Relational CABs, Controlling for LeaderCab

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	251.66	0.00**	.550
Leader Race	2	1.40	0.24	.013
Leader Gender	1	0.85	0.35	.004
P.Race	2	3.20	0.14	.003
P.Gender	1	1.33	0.25	.006
Leader Race * Leader Gender	2	1.16	0.31	.011
Leader Race * P.Race	4	0.73	0.57	.014
Leader Race * P.Gender	2	0.53	0.58	.005
Leader Gender * P.Race	2	1.93	0.14	.018
Leader Gender * P.Gender	1	0.77	0.38	.004
P.Race * P.Gender	2	0.28	0.75	.003
Leader Race * Leader Gender * P.Race	4	0.60	0.66	.011
Leader Race * Leader Gender * P.Gender	2	0.16	0.85	.002
Leader Race * P.Race * P.Gender	3	1.17	0.32	.017
Leader Gender * P.Race * P.Gender	1	1.95	0.16	.009
Leader Race * Leader Gender * P.Race * P.Gender	1	0.53	0.46	.003

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .637 (Adjusted R Squared = .583). P.Gender = Participant Gender, P.Race = Participant Race.

Table 28.
Study 2, Power CABS, Controlling for LeaderCABs

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	166.76	0.00**	.447
Leader Race	2	2.99	0.05	.028
Leader Gender	1	0.08	0.77	.000
P.Race	2	0.92	0.40	.009
P.Gender	1	0.15	0.70	.001
Leader Race * Leader Gender	2	0.75	0.47	.007
Leader Race * P.Race	4	2.01	0.09	.038
Leader Race * P.Gender	2	0.55	0.57	.005
Leader Gender * P.Race	2	0.16	0.85	.002
Leader Gender * P.Gender	1	4.76	0.13	.023
P.Race * P.Gender	2	0.92	0.40	.009
Leader Race * Leader Gender * P.Race	4	0.42	0.79	.008
Leader Race * Leader Gender * P.Gender	2	2.24	0.10	.021
Leader Race * P.Race * P.Gender	3	1.07	0.36	.015
Leader Gender * P.Race * P.Gender	1	7.13	0.23	.003
Leader Race * Leader Gender * P.Race * P.Gender	1	2.65	0.10	.013

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .548 (Adjusted R Squared = .480) P.Gender = Participant Gender, P.Race = Participant Race.

Table 29.
Study 2, *Ethical Leadership, Controlling for LeaderCABs*

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	140.11	0.00**	.405
Leader Race	2	0.78	0.46	.007
Leader Gender	1	0.90	0.34	.004
P.Race	2	0.96	0.38	.009
P.Gender	1	0.16	0.68	.001
Leader Race * Leader Gender	2	0.03	0.97	.000
Leader Race * P.Race	4	0.27	0.89	.005
Leader Race * P.Gender	2	1.34	0.26	.013
Leader Gender * P.Race	2	0.76	0.46	.007
Leader Gender * P.Gender	1	1.34	0.24	.006
P.Race * P.Gender	2	0.92	0.40	.009
Leader Race * Leader Gender * P.Race	4	0.30	0.88	.006
Leader Race * Leader Gender * P.Gender	2	1.23	0.29	.012
Leader Race * P.Race * P.Gender	3	1.49	0.22	.021
Leader Gender * P.Race * P.Gender	1	4.01	0.04*	.019
Leader Race * Leader Gender * P.Race * P.Gender	1	0.17	0.67	.001

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .504 (Adjusted R Squared = .429). P.Gender = Participant Gender, P.Race = Participant Race.

Table 30.
Study 2, General Leader Impressions, Controlling for LeaderCABs

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	164.65	0.00**	.444
Leader Race	2	0.35	0.70	.003
Leader Gender	1	0.00	0.98	.000
P.Race	2	0.05	0.95	.000
P.Gender	1	0.51	0.47	.002
Leader Race * Leader Gender	2	0.02	0.97	.000
Leader Race * P.Race	4	0.30	0.87	.006
Leader Race * P.Gender	2	1.29	0.27	.012
Leader Gender * P.Race	2	0.95	0.39	.009
Leader Gender * P.Gender	1	0.26	0.61	.001
P.Race * P.Gender	2	0.07	0.92	.001
Leader Race * Leader Gender * P.Race	4	0.09	0.98	.002
Leader Race * Leader Gender * P.Gender	2	1.16	0.31	.011
Leader Race * P.Race * P.Gender	3	0.83	0.48	.012
Leader Gender * P.Race * P.Gender	1	1.51	0.22	.007
Leader Race * Leader Gender * P.Race * P.Gender	1	0.72	0.39	.003

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .528 (Adjusted R Squared = .457). P.Gender = Participant Gender, P.Race = Participant Race.

Table 31.
Study 2, Enjoy working with as Subordinate, Controlling for LeaderCABs

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	35.45	0.00**	.147
Leader Race	2	3.54	0.13	.003
Leader Gender	1	0.78	0.37	.004
P.Race	2	1.08	0.34	.010
P.Gender	1	3.80	0.05†	.018
Leader Race * Leader Gender	2	0.54	0.58	.005
Leader Race * P.Race	4	0.75	0.56	.014
Leader Race * P.Gender	2	1.34	0.26	.013
Leader Gender * P.Race	2	2.89	0.05†	.027
Leader Gender * P.Gender	1	1.27	0.26	.006
P.Race * P.Gender	2	1.28	0.28	.012
Leader Race * Leader Gender * P.Race	4	0.31	0.87	.006
Leader Race * Leader Gender * P.Gender	2	0.22	0.80	.002
Leader Race * P.Race * P.Gender	3	1.08	0.35	.016
Leader Gender * P.Race * P.Gender	1	1.74	0.18	.008
Leader Race * Leader Gender * P.Race * P.Gender	1	0.00	0.96	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .294 (Adjusted R Squared = .188). P.Gender = Participant Gender, P.Race = Participant Race.

Table 32.
Study 2, Enjoy as working with as a Peer, Controlling for LeaderCABs

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	49.77	0.00**	.195
Leader Race	2	1.80	0.16	.017
Leader Gender	1	0.15	0.70	.001
P.Race	2	0.20	0.81	.002
P.Gender	1	0.11	0.74	.001
Leader Race * Leader Gender	2	0.13	0.87	.001
Leader Race * P.Race	4	0.36	0.83	.007
Leader Race * P.Gender	2	0.28	0.70	.003
Leader Gender * P.Race	2	2.06	0.13	.020
Leader Gender * P.Gender	1	0.89	0.34	.004
P.Race * P.Gender	2	0.26	0.77	.002
Leader Race * Leader Gender * P.Race	4	0.86	0.48	.016
Leader Race * Leader Gender * P.Gender	2	0.48	0.61	.005
Leader Race * P.Race * P.Gender	3	0.95	0.41	.014
Leader Gender * P.Race * P.Gender	1	1.52	0.21	.007
Leader Race * Leader Gender * P.Race * P.Gender	1	0.54	0.46	.003

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .323 (Adjusted R Squared = .221). P.Gender = Participant Gender, P.Race = Participant Race.

Table 33.
Study 2, Recommendation for a Promotion, Controlling for LeaderCABs

Source	*df*	*F*	*p*	η_p^2
Leader CABs	1	38.69	0.00**	.159
Leader Race	2	3.77	0.25	.005
Leader Gender	1	0.53	0.46	.003
P.Race	2	2.30	0.10	.022
P.Gender	1	0.28	0.59	.001
Leader Race * Leader Gender	2	0.60	0.54	.006
Leader Race * P.Race	4	1.25	0.29	.024
Leader Race * P.Gender	2	0.15	0.86	.001
Leader Gender * P.Race	2	0.55	0.57	.005
Leader Gender * P.Gender	1	0.73	0.39	.004
P.Race * P.Gender	2	0.04	0.95	.000
Leader Race * Leader Gender * P.Race	4	1.39	0.24	.026
Leader Race * Leader Gender * P.Gender	2	0.19	0.82	.002
Leader Race * P.Race * P.Gender	2	0.27	0.76	.003
Leader Gender * P.Race * P.Gender	1	0.12	0.72	.001
Leader Race * Leader Gender * P.Race * P.Gender	1	0.01	0.94	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .349 (Adjusted R Squared = .254). P.Gender = Participant Gender, P.Race = Participant Race.

Table 34.
Study 2, Ethical Leadership, Controlling for GLI

Source	*df*	*F*	*p*	η_p^2
General Leader Impressions	1	219.42	.00**	.516
Leader Race	2	1.50	.22	.014
Leader Gender	1	.902	.34	.004
P.Race	2	1.33	.26	.013
P.Gender	1	.20	.65	.001
Leader Race * Leader Gender	2	.05	.94	.001
Leader Race * P.Race	4	.52	.72	.010
Leader Race * P.Gender	2	.39	.67	.004
Leader Gender * P.Race	2	.10	.89	.001
Leader Gender * P.Gender	1	.16	.68	.001
P.Race * P.Gender	2	.89	.41	.009
Leader Race * Leader Gender * P.Race	4	.30	.87	.006
Leader Race * Leader Gender * P.Gender	2	1.12	.32	.011
Leader Race * P.Race * P.Gender	3	1.48	.22	.021
Leader Gender * P.Race * P.Gender	1	.99	.31	.005
Leader Race * Leader Gender * P.Race * P.Gender	1	.24	.61	.001

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .504 (Adjusted R Squared = .429). P.Gender = Participant Gender, P.Race = Participant Race.

Table 35.
Study 2, Effectiveness, Controlling for GLI

Source	*df*	*F*	*p*	η_p^2
General Leader Impressions	1	230.59	.00**	.528
Leader Race	2	1.28	.27	.012
Leader Gender	1	.17	.67	.001
P.Race	2	2.27	.10	.022
P.Gender	1	3.99	.05†	.019
Leader Race * Leader Gender	2	1.02	.36	.010
Leader Race * P.Race	4	2.41	.05†	.005
Leader Race * P.Gender	2	1.04	.35	.010
Leader Gender * P.Race	2	1.29	.27	.012
Leader Gender * P.Gender	1	1.13	.50	.008
P.Race * P.Gender	2	2.08	.12	.020
Leader Race * Leader Gender * P.Race	4	1.25	.21	.009
Leader Race * Leader Gender * P.Gender	2	.40	.66	.004
Leader Race * P.Race * P.Gender	3	1.01	.10	.015
Leader Gender * P.Race * P.Gender	1	1.36	.10	.017

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .456 (Adjusted R Squared = .374). P.Gender = Participant Gender, P.Race = Participant Race.

Table 36.
Study 2, General Leadership Impressions, Controlling for EL

Source	*df*	*F*	*p*	η_p^2
Ethical Leadership	1	219.42	.00**	.516
Leader Race	2	.48	.61	.005
Leader Gender	1	.72	.39	.003
P.Race	2	.18	.82	.002
P.Gender	1	1.42	.23	.007
Leader Race * Leader Gender	2	.00	.99	.000
Leader Race * P.Race	4	.27	.89	.005
Leader Race * P.Gender	2	.34	.70	.003
Leader Gender * P.Race	2	.13	.87	.001
Leader Gender * P.Gender	1	1.10	.29	.005
P.Race * P.Gender	2	.73	.47	.007
Leader Race * Leader Gender * P.Race	4	.17	.95	.003
Leader Race * Leader Gender * P.Gender	2	.31	.72	.003
Leader Race * P.Race * P.Gender	3	.04	.98	.001
Leader Gender * P.Race * P.Gender	1	.42	.51	.002
Leader Race * Leader Gender * P.Race * P.Gender	1	.02	.86	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .504 (Adjusted R Squared = .429). P.Gender = Participant Gender, P.Race = Participant Race.

Table 37.
Study 2, Effectiveness, Controlling for EL

Source	*df*	*F*	*p*	η_p^2
Ethical Leadership	1	136.21	.00**	.398
Leader Race	2	1.28	.28	.012
Leader Gender	1	.99	.32	.005
P.Race	2	.81	.44	.008
P.Gender	1	5.23	.02*	.025
Leader Race * Leader Gender	2	.77	.46	.007
Leader Race * P.Race	4	2.37	.05†	.044
Leader Race * P.Gender	2	1.07	.34	.010
Leader Gender * P.Race	2	.81	.44	.008
Leader Gender * P.Gender	1	9.88	.00**	.046
P.Race * P.Gender	2	1.73	.17	.017
Leader Race * Leader Gender * P.Race	4	2.87	.02*	.053
Leader Race * Leader Gender * P.Gender	2	.07	.92	.001
Leader Race * P.Race * P.Gender	3	2.48	.06†	.035
Leader Gender * P.Race * P.Gender	1	11.40	.00**	.052

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .456 (Adjusted R Squared = .374). P.Gender = Participant Gender, P.Race = Participant Race.

Table 38.
Study 2, Promotion Recommendation, Controlling for EL

Source	*df*	*F*	*p*	η_p^2
Ethical Leadership	1	29.91	.00**	.127
Leader Race	2	4.40	.01**	.041
Leader Gender	1	.12	.72	.001
P.Race	2	2.36	.09†	.023
P.Gender	1	.97	.32	.005
Leader Race * Leader Gender	2	.44	.64	.004
Leader Race * P.Race	4	1.86	.11	.035
Leader Race * P.Gender	2	.32	.72	.003
Leader Gender * P.Race	2	.21	.80	.002
Leader Gender * P.Gender	1	2.58	.10	.012
P.Race * P.Gender	2	.28	.75	.003
Leader Race * Leader Gender * P.Race	4	.96	.42	.019
Leader Race * Leader Gender * P.Gender	2	.46	.63	.004
Leader Race * P.Race * P.Gender	2	.07	.93	.001
Leader Gender * P.Race * P.Gender	1	.23	.62	.001

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .456 (Adjusted R Squared = .374). P.Gender = Participant Gender, P.Race = Participant Race.

Table 39.
Study 2, Enjoy working with as a Subordinate, Controlling for EL

Source	*df*	*F*	*p*	η_p^2
Ethical Leadership	1	86.11	.00**	.295
Leader Race	2	4.18	.01*	.039
Leader Gender	1	.23	.63	.001
P.Race	2	.49	.61	.005
P.Gender	1	4.27	.04*	.020
Leader Race * Leader Gender	2	.59	.55	.006
Leader Race * P.Race	4	1.25	.28	.024
Leader Race * P.Gender	2	.97	.37	.009
Leader Gender * P.Race	2	2.11	.12	.020
Leader Gender * P.Gender	1	.32	.56	.002
P.Race * P.Gender	2	1.10	.33	.011
Leader Race * Leader Gender * P.Race	4	.38	.81	.008
Leader Race * Leader Gender * P.Gender	2	.65	.52	.006
Leader Race * P.Race * P.Gender	3	.73	.53	.011
Leader Gender * P.Race * P.Gender	1	.15	.69	.001

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .456 (Adjusted R Squared = .374). P.Gender = Participant Gender, P.Race = Participant Race.

Table 40.
Study 2, Enjoy working with as a Peer, Controlling for EL

Source	*df*	*F*	*p*	η_p^2
Ethical Leadership	1	98.11	.00**	.323
Leader Race	2	1.50	.22	.014
Leader Gender	1	.01	.90	.000
P.Race	2	.27	.75	.003
P.Gender	1	.14	.70	.001
Leader Race * Leader Gender	2	.11	.89	.001
Leader Race * P.Race	4	.78	.53	.015
Leader Race * P.Gender	2	.20	.81	.002
Leader Gender * P.Race	2	1.30	.26	.013
Leader Gender * P.Gender	1	.04	.84	.000
P.Race * P.Gender	2	.23	.79	.002
Leader Race * Leader Gender * P.Race	4	.72	.57	.014
Leader Race * Leader Gender * P.Gender	2	.11	.89	.001
Leader Race * P.Race * P.Gender	3	.68	.56	.010
Leader Gender * P.Race * P.Gender	1	.02	.87	.000

Note. $N = 238$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .456 (Adjusted R Squared = .374). P.Gender = Participant Gender, P.Race = Participant Race.

Table 41. *Confirmatory Factor Analysis for Study 3.*

Factors	*Loading*	*Items*
Classism	0.70	People who stay on welfare have no desire to work.
	0.75	Welfare keeps the nation in debt.
	0.60	People who don't make much money are generally unmotivated.
	0.66	Homeless people should get their acts together and become productive members of society.
	0.80	Too many of my tax dollars are spent to take care of those who are unwilling to take care of themselves.
	0.64	If every individual would carry his/her own weight, there would be no poverty.
	0.53	There are more poor people than wealthy people in prisons because poor people commit more crimes.
	0.66	Poor people are lazy.
	0.67	Most poor people are in debt because they can't manage their money.
Sexism	0.78	Women should worry less about their rights and more about becoming good wives and mothers.
	0.77	It is ridiculous for a woman to run a locomotive and for a man to darn socks.
	0.85	The intellectual leadership of a community should be largely in the hands of men.
	0.80	In general, the father should have greater authority than the mother in bringing up the children.
	0.74	There are many jobs in which men should be given preference over women in being hired or promoted.

Table 45. *Confirmatory Factor Analysis for Study 3, Contd.*

Racism	0.81	I favor laws that permit racial minority persons to rent or purchase house, even when the person offering the property for sale or rent does not wish to sell or rent to minorities.
	0.62	Racial minorities have more influence on school desegregation plans than they ought to have.
	0.81	Racial minorities are getting too demanding in their push for equal rights.
	0.63	It is a bad idea for racial minorities and Whites to marry one another.
	0.55	Racial minorities should not push themselves where they are not wanted.
	0.85	If a racial minority family with about the same income and education as I have moved in next door, I would mind a great deal.
	0.77	It is wrong for the United Stated Supreme Court to outlaw segregation in its 1954 decision.
	0.81	Over the past few years, racial minorities have gotten more economically than they deserve.
	0.62	Over the past few years, the government and news media have shown more respect to racial minorities than they deserve.
Religious Intolerance	0.51	Christians are intolerant of people with other religious beliefs.
	0.66	Catholics have a “holier than thou” attitude.
	0.67	Jewish people are deceitful and money-hungry.
	0.77	Atheists and agnostics are more self-centered than people from other religious groups.
	0.67	Muslims are more treacherous than other groups of religious people.
	0.73	Wiccan and pagan people practice thinly veiled evil.
	0.61	Many of the social problems in the U.S. today are due to non-Christian religious groups.
	0.51	The Hindu beliefs about reincarnation results in people not taking responsibility for their actions in this life since there is always the next life.
	0.66	Despite what Buddhist people may say, Buddhism isn’t really a religious, but more a philosophy.

Table 42.
Means, standard deviations, and bivariate correlations among the Study 3 variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. AB D-Score	-0.16	0.44										
2. AC D-Score	0.08	0.43	.06									
3. AD D-Score	0.00	0.47	.14**	.00								
4. BC D-Score	0.19	0.44	-.07	.13**	-.09							
5. BD D-Score	0.07	0.47	.00	.04	.04	.12*						
6. CD D-Score	-0.07	0.45	.09	.01	.05	-.24**	-0.1					
7. Religious Intol	2.24	0.82	.02	.03	-.01	-.07	-.02	.09	(.84)			
8. Classism	2.49	0.84	.06	.02	.03	.01	.06	.11	.71**	(.87)		
9. Racism	1.98	0.86	.05	.02	.04	-.08	-.01	.07	.77**	.75**	(.75)	
10. Sexism	1.91	0.90	.04	.05	-.02	-.11	-.03	.03	.71**	.60**	.79**	(.79)

Table 43.

Correlation Coefficient for the IAT Black/Hispanic Condition

Variable	AB D-Score	AC D-Score	AD D-Score	BC D-Score	BD D-Score	CD D-Score
1. Religious Intolerance	.107	-.031	-.009	-.165	-.124	.201*
2. Classism	.082	-.070	-.062	-.057	-.048	.218**
3. Racism	.102	-.045	.033	-.144	-.166*	.183*
4. Sexism	.071	-.059	.025	-.165	-.185*	.136

Note. $N = 140$ † $p < .10$. * $p < .05$. ** $p < .01$

Table 44.

Correlation Coefficient for the IAT Black/White Condition

Variable	AB D-Score	AC D-Score	AD D-Score	BC D-Score	BD D-Score	CD D-Score
1. Religious Intolerance	-.117	.149	.054	.062	.055	.005
2. Classism	.039	.124	.160	.020	.183	.042
3. Racism	-.017	.134	.068	-.014	.134	-.038
4. Sexism	.044	.205†	.033	-.052	.090	-.039

Note. $N = 85$ † $p < .10$. * $p < .05$. ** $p < .01$

Table 45.

Correlation Coefficient for the IAT White/Hispanic Condition

Variable	AB D-Score	AC D-Score	AD D-Score	BC D-Score	BD D-Score	CD D-Score
1. Religious Intolerance	.023	-.054	-.106	-.032	.066	-.120
2. Classism	.077	-.003	.145	.122	.109	-.073
3. Racism	.000	-.040	.023	-.009	.121	-.130
4. Sexism	-.045	.027	-.189	-.066	.131	-.169

Note. $N = 57$ $^{\dagger}p < .10$. $^{*}p < .05$. $^{**}p < .01$

Table 46.
Study 3, AB D-score

Source	*df*	*F*	*p*	η_p^2
IAT Condition	2	1.05	0.35	0.008
P.Gender	1	0.00	0.99	0.000
P.Race	3	0.90	0.44	0.011
IAT Cond * P.Race	2	0.13	0.88	0.001
IAT Cond * P.Race	6	1.05	0.39	0.024
P.Gender * P.Race	3	1.07	0.36	0.013
IAT Cond * P.Gender * P.Race	5	0.34	0.88	0.007

Note. $N = 242$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .085 (Adjusted R Squared = .006). P.Gender = Participant Gender, P.Race = Participant Race.

Table 47.
Study 3, AC D-score

Source	*df*	*F*	*p*	η_p^2
IAT Cond.	2	3.23	0.04*	0.025
P.Gender	1	0.23	0.63	0.001
P.Race	3	0.65	0.58	0.008
IAT Cond. * P.Gender	2	2.64	0.07†	0.020
IAT Cond.* P.Race	6	1.41	0.21	0.032
P.Gender * P.Race	3	0.61	0.61	0.007
IAT Cond. * P.Gender * P.Race	5	1.78	0.11	0.034

Note. $N = 242$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .090 (Adjusted R Squared = .011). P.Gender = Participant Gender, P.Race = Participant Race.

Table 48.
Study 3, BD D-Score

Source	*df*	*F*	*p*	η_p^{22}
IAT Cond.	2	1.02	0.36	0.008
P. Gender	1	0.83	0.36	0.003
P.Race	3	0.12	0.95	0.001
IAT Cond.* P.Gender	2	0.14	0.87	0.001
IAT Cond. * P.Race	6	0.90	0.49	0.021
P.Gender * P.Race	3	1.47	0.22	0.017
IAT Cond. * P.Gender * P.Race	5	2.35	0.04*	0.044

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .134 (Adjusted R Squared = .058). P.Gender = Participant Gender, P.Race = Participant Race.

Table 49.
Study 3, AD D-Score

Source	*df*	*F*	*p*	η_p^2
IAT Cond.	2	1.90	0.15	0.015
P.Gender	1	6.14	0.01**	0.024
P.Race	3	0.97	0.41	0.011
IAT Cond.* P. Gender	2	0.28	0.75	0.002
IAT Cond.* P.Race	6	1.46	0.19	0.033
P.Gender * P.Race	3	2.90	0.03*	0.033
IAT Cond.* P.Gender * P.Race	5	1.26	0.28	0.024

Note. $N = 242$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .118 (Adjusted R Squared = .041). P.Gender = Participant Gender, P.Race = Participant Race.

Table 50.
Study 3, BC D-Score

Source	*df*	*F*	*p*	η_p^2
IAT Cond.	2	1.68	0.18	0.013
P.Gender	1	0.02	0.90	0.000
P.Race	3	2.36	0.07†	0.027
IAT Cond. * P.Gender	2	0.05	0.95	0.000
IAT Cond. * P.Race	6	1.67	0.12	0.038
P.Gender * P.Race	3	1.33	0.26	0.016
IAT Cond. * P.Gender * P.Race	5	0.31	0.90	0.006

Note. $N = 242$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .090 (Adjusted R Squared = .011). P.Gender = Participant Gender, P.Race = Participant Race.

Table 51.
Study 3, CD D-Score

Source	*df*	*F*	*p*	η_p^2
IAT Cond.	2	0.65	0.52	0.005
P. Gender	1	0.03	0.87	0.000
P.Race	3	1.33	0.26	0.016
IAT Cond.* P.Gender	2	0.97	0.38	0.008
IAT Cond. * P.Race	6	1.04	0.40	0.024
P.Gender * P.Race	3	1.75	0.15	0.020
IAT Cond. * P.Gender * P.Race	5	0.73	0.60	0.014

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .082 (Adjusted R Squared = .002). P.Gender = Participant Gender, P.Race = Participant Race.

Table 52.
Study 3, AB D-Score Controlling for Bias Measures

Source	*df*	*F*	*p*	η_p^2
Religious Intolerance	1	0.35	0.55	0.001
Classism	1	0.83	0.36	0.003
Racism	1	0.00	0.94	0000
Sexism	1	0.08	0.78	0000
IAT Cond.	2	0.14	0.87	0.001

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .006 (Adjusted R Squared = -.015).

Table 53.
Study 3, AC D-Score Controlling for Bias Measures

Source	*df*	*F*	*p*	η_p^2
Religious Intolerance	1	0.03	0.87	0000
Classism	1	0.00	0.96	0000
Racism	1	0.28	0.59	0.001
Sexism	1	0.68	0.40	0.002
IAT Cond.	2	0.99	0.37	0.007

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .011 (Adjusted R Squared = -.011)

Table 54.
Study 3, AD D-Score Controlling for Bias Measures

Source	*df*	*F*	*p*	η_p^2
Religious Intolerance	1	0.55	0.46	0.002
Classism	1	0.26	0.61	0.001
Racism	1	1.25	0.27	0.005
Sexism	1	0.84	0.36	0.003
IAT Cond.	2	2.56	0.08†	0.018

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .029 (Adjusted R Squared = .008)

Table 55.
Study 3, BC D-Score Controlling for Bias Measures

Source	*df*	*F*	*p*	η_p^2
Religious Intolerance	1	0.21	0.64	0.001
Classism	1	1.97	0.16	0.007
Racism	1	0.19	0.67	0.001
Sexism	1	1.15	0.28	0.004
IAT Cond.	2	1.06	0.35	0.008

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .027 (Adjusted R Squared = .006)

Table 56.
Study 3, BD D-Score Controlling for Bias Measures

Source	*df*	*F*	*p*	η_p^2
Religious Intolerance	1	0.75	0.38	0.003
Classism	1	3.44	0.06†	0.012
Racism	1	0.21	0.65	0.001
Sexism	1	0.07	0.78	0000
IAT Cond.	2	4.05	0.01**	0.029

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .040 (Adjusted R Squared = .019)

Table 57.
Study 3, CD D-Score Controlling for Bias Measures

Source	*df*	*F*	*p*	η_p^2
Religious Intolerance	1	0.51	0.47	0.002
Classism	1	1.63	0.20	0.006
Racism	1	0.01	0.92	0000
Sexism	1	0.45	0.50	0.002
IAT Cond.	2	0.10	0.90	0.001

Note. $N = 282$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .017 (Adjusted R Squared = -.005)

Table 58, *Confirmatory Factor Analysis for Study 4.*

Factors	*Loading*	*Items*
Ethical Leadership	0.75	Conducts his/her personal life in an ethical manner.
	0.77	Defines success not just by results but also by the way they are obtained.
	0.78	Listens to what employees have to say.
	0.63	Disciplines employees who violate ethical standards.
	0.84	Makes fair and balanced decisions.
	0.86	Can be trusted.
	0.76	Discusses business ethics or values with employees.
	0.84	Sets an example of how to do things the right way in terms of ethics.
	0.81	Has the best interest of employees in mind.
	0.81	When making decisions asks, "What is the right thing to do?"
General Leadership Impression	0.73	A high degree of leadership ability.
	0.74	How willing are you to choose the leader as a formal leader.
	0.66	How typical the leader was of a leader.
	0.83	What extent the leader engaged in leader behavior.
	0.85	The degree to which the leader fit the image of a leader.
Effectiveness	0.81	How effective is This Leader at achieving work objectives?
	0.83	How effective is This Leader at achieving the goals and values of the organization?
	0.85	How effective is This Leader in general?

Table 59.
Mechanical Turk vs. MBA ANOVA for Study 4

Source		*df*	*F*	*p*
General Leader Impressions * MTvsMBA	Between Groups	1	13.801	0.00**
	Within Groups	425		
	Total	426		
Effective Mean * MTvsMBA	Between Groups	1	25.033	0.00**
	Within Groups	421		
	Total	422		
Ethical Leadership * MTvsMBA	Within Groups	1	9.699	0.00**
	Total	426		
		427		

Note. $N = 428$ † $p < .10$. * $p < .05$. ** $p < .01$. MT = Mechanical Turk participants, MBA= Masters of Business Administration student participants.

Table 60.
Ethical Leadership MTvs. MBA Controlling for Participant Gender and Race Study 4

Source	*df*	*F*	*p*
P.Gender	1	3.03	0.08†
MTvsMBA	1	1.80	0.18
P.Race	7	0.33	0.94
MTvsMBA * P.Race	5	0.26	0.93

Note. $N = 428$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .040 (Adjusted R Squared = .001). P.Gender = Participant Gender, P.Race = Participant Race. MT = Mechanical Turk participants, MBA= Masters of Business Administration student participants.

Table 61.
Effectiveness MTvs. MBA Controlling for Participant Gender and Race

Source	*df*	*F*	*p*
P.Gender	1	6.91	0.00**
MTvsMBA	1	1.62	0.20
P.Race	7	0.55	0.80
MTvsMBA * P.Gender	5	1.05	0.39

Note. $N = 428$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .086 (Adjusted R Squared = .049). P.Gender = Participant Gender, P.Race = Participant Race. MT = Mechanical Turk participants, MBA= Masters of Business Administration student participants.

Table 62.
GLI MTvs. MBA Controlling for Participant Gender and Race

Source	*df*	*F*	*p*
P.Gender	1	.09	.75
MTvsMBA	1	4.84	.02*
P.Race	1	.16	.68
MTvsMBA * P.Gender	1	.47	.49

Note. $N = 428$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .086 (Adjusted R Squared = .049). P.Gender = Participant Gender, P.Race = Participant Race. MT = Mechanical Turk participants, MBA= Masters of Business Administration student participants. MT participants provided higher GLI scores compared to MBA participants.

Table 63.
Means, standard deviations, and bivariate correlations among the variables for Study 4

	Means	SD	1	2	3	4	5	6	7
1. Ethical Leadership	5.18	0.92	(.94)						
2. Effectiveness	3.97	0.65	.67**	(.86)					
3. General Leader Impressions	3.66	0.67	.64**	.60**	(.87)				
4. Religious Intol	2.15	0.83	-.16**	-.22**	-.10	(.84)			
5. Classism	2.47	0.88	-.02	-.08	-.03	.70**	(.89)		
6. Racism	1.94	0.88	-.18**	-.20**	-.13*	.78**	.67**	(.87)	
7. Sexism	1.84	0.88	-.20**	-.26**	-.16**	.74**	.62**	.84**	(.83)

Note. $N = 286$ † $p < .10$. * $p < .05$. ** $p < .01$

Table 64.
Study 4, Ethical Leadership

Source	*df*	*F*	*p*	ηp^2
Leader Race	1	0.28	0.59	0.001
Leader Gender	1	0.15	0.70	0.001
Context	2	2.60	0.07†	0.021
P.Race	1	0.12	0.73	0000
P.Gender	1	0.08	0.78	0000
Leader Race * Leader Gender	1	0.03	0.87	0000
Leader Race * Context	2	0.56	0.57	0.005
Leader Race * P.Race	1	1.15	0.28	0.005
Leader Race * P.Gender	1	2.74	0.09†	0.011
Leader Gender * Context	2	0.55	0.57	0.004
Leader Gender * P.Race	1	0.00	0.96	0000
Leader Gender * P.Gender	1	0.35	0.55	0.001
Context * P.Race	2	2.67	0.07†	0.021
Context * P.Gender	2	0.05	0.94	0000
P.Race * P.Gender	1	0.10	0.75	0000
Leader Race * Leader Gender * Context	2	0.30	0.73	0.002
Leader Race * Leader Gender * P.Race	1	0.00	0.99	0000
Leader Race * Leader Gender * P.Gender	1	1.02	0.31	0.004
Leader Race * Context * P.Race	2	1.45	0.23	0.012
Leader Race * Context * P.Gender	2	1.28	0.28	0.010
Leader Race * P.Race * P.Gender	1	1.44	0.23	0.006
Leader Gender * Context * P.Race	2	2.73	0.06†	0.022
Leader Gender * Context * P.Gender	2	0.85	0.43	0.007
Leader Gender * P.Race * P.Gender	1	2.53	0.11	0.010
Context * P.Race * P.Gender	2	0.77	0.46	0.006
Leader Race * Leader Gender * Context * P.Race	1	0.47	0.49	0.002
Leader Race * Leader Gender * Context * P.Gender	2	0.81	0.44	0.007

Note. $N = 286$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .172 (Adjusted R Squared = .029). P.Gender = Participant Gender, P.Race = Participant Race.

Table 65.
Study 4, Effectiveness

Source	*df*	*F*	*p*	ηp^2
Leader Race	1	0.13	0.71	0.001
Leader Gender	1	0.48	0.48	0.002
Context	2	7.27	0.00**	0.057
P.Race	1	0.91	0.34	0.004
P.Gender	1	2.09	0.14	0.009
Leader Race * Leader Gender	1	0.00	0.96	0000
Leader Race * Context	2	0.06	0.94	0000
Leader Race * P.Race	1	0.57	0.45	0.002
Leader Race * P.Gender	1	0.12	0.73	0000
Leader Gender * Context	2	0.17	0.84	0.001
Leader Gender * P.Race	1	0.74	0.39	0.003
Leader Gender * P.Gender	1	0.02	0.88	0000
Context * P.Race	2	5.43	0.00**	0.043
Context * P.Gender	2	0.68	0.51	0.006
P.Race * PGender	1	0.15	0.69	0.001
Leader Race * Leader Gender * Context	2	1.77	0.17	0.014
Leader Race * Leader Gender * P.Race	1	0.22	0.63	0.001
Leader Race * Leader Gender * P.Gender	1	1.63	0.20	0.007
Leader Race * Context * P.Race	2	0.30	0.74	0.002
Leader Race * Context * P.Gender	2	1.66	0.19	0.014
Leader Race * P.Race * P.Gender	1	0.29	0.59	0.001
Leader Gender * Context * P.Race	2	1.90	0.15	0.015
Leader Gender * Context * P.Gender	2	0.20	0.82	0.002
Leader Gender * P.Race * P.Gender	1	0.15	0.70	0.001
Context * P.Race * P.Gender	2	0.20	0.82	0.002
Leader Race * Leader Gender * Context * P.Race	1	0.88	0.34	0.004
Leader Race * Leader Gender * Context * P.Gender	2	1.15	0.32	0.009

Note. $N = 286$ † $p < .10$. * $p < .05$. ** $p < .01$,R Squared = .192 (Adjusted R Squared = .051). P.Gender = Participant Gender, P.Race = Participant Race.

Table 66.
Study 4, General Leader Impressions

Source	*df*	*F*	*p*	ηp^2
Leader Race	1	0.13	0.71	0.001
Leader Gender	1	0.00	0.95	0000
Context	2	5.02	0.00**	0.040
P.Race	1	0.04	0.84	0000
P.Gender	1	0.17	0.68	0.001
Leader Race * Leader Gender	1	0.08	0.78	0000
Leader Race * Context	2	0.15	0.85	0.001
Leader Race * P.Race	1	0.97	0.32	0.004
Leader Race * P.Gender	1	0.23	0.63	0.001
Leader Gender * Context	2	0.20	0.81	0.002
Leader Gender * P.Race	1	0.11	0.74	0000
Leader Gender * P.Gender	1	0.22	0.63	0.001
Context * P.Race	2	1.51	0.22	0.012
Context * P.Gender	2	1.33	0.26	0.011
P.Race * P.Gender	1	0.35	0.55	0.001
Leader Race * Leader Gender * Context	2	0.45	0.63	0.004
Leader Race * Leader Gender * P.Race	1	0.91	0.34	0.004
Leader Race * Leader Gender * P.Gender	1	2.48	0.11	0.010
Leader Race * Context * P.Race	2	0.73	0.48	0.006
Leader Race * Context * P.Gender	2	1.53	0.22	0.012
Leader Race * P.Race * P.Gender	1	0.12	0.72	0000
Leader Gender * Context * P.Race	2	0.87	0.41	0.007
Leader Gender * Context * P.Gender	2	0.02	0.98	0000
Leader Gender * P.Race * P.Gender	1	0.04	0.84	0000
Context * P.Race * P.Gender	2	0.12	0.88	0.001
Leader Race * Leader Gender * Context * P.Race	1	0.26	0.61	0.001
Leader Race * Leader Gender * Context * P.Gender	2	0.75	0.47	0.006

Note. $N = 286$ † $p < .10$. * $p < .05$. ** $p < .01$, R Squared = .151 (Adjusted R Squared = .005). P.Gender = Participant Gender, P.Race = Participant Race.

Table 67. *Hypotheses Table*

Hypotheses Statement	Study	Support
-**H1a**: The traits of intelligent, agentic, dominant, and assertive will be rated more prototypical for White male leaders than any of the other ethnic-gender leader combinations.	1a	No
-**H1b:** Communal, warm, interdependent and caring traits will be rated as more prototypical of female leaders than they will be rated for White male leaders.	1a	Yes
-**H1c:** White male leaders will receive the lowest ratings on religious, spiritual, and interdependent traits as compared to all other ethnic/gender leaders.	1a	Yes
Hypothesis 2: White male Leader traits will be viewed as more similar to those of the typical "ideal leader" than will the similarity of traits of the other ethnic-gender leader combinations with the typical "ideal leader."	1a/1b	No
Hypothesis 3: The average prototypicality ratings of the traits associated with the White male leader will be higher than the average prototypicality ratings for the other ethnic-gender leader combinations	1b	No
Hypothesis 4: White male leaders will have higher effectiveness, and general leader impression ratings than the other ethnic-gender leader combinations.	2	No
Hypothesis 5: Once the average prototypicality is controlled for, there will be no difference between White male leaders and other ethnic-gender leaders in terms of effectiveness, liking/similarity and trust evaluations ratings.	2	Yes
Exploratory Hypothesis 1: If White male leader are considered the "ideal" leader they should be rated higher in terms of ethicality than other ethnic and gender leader combinations, however Female Leaders may be seen as more warm or interdependent and thus be considered more ethical than males.	2	No
Hypothesis 6: After controlling for ethicality, female leaders will still be significantly lower in terms of desirable as immediate supervisor than will male leaders.	2/4	No
Hypothesis 7: The speed with which participants respond to White male leader targets on the IAT will be faster compared to the speed with which participants respond to ethnic leaders when evaluating the leader ethicality.	3	Race P dependent: No & Yes
Exploratory Hypothesis 2: The speed with which participants respond to female leaders will be faster compared to the speed with which participants respond to male leaders when evaluating the leader's ethicality.	3	Yes
Exploratory Hypothesis 3: Participants ratings of leader ethicality will establish a rank order of leader ethicality based on ethnicity and gender: 1. White male leaders 2. White female leaders 3. Black female leaders 4. Hispanic female leaders 5. Hispanic male leaders 6. Black male leaders	3	Yes: Gender and Race Dependent
Hypothesis 8: White male leaders will be rated higher in ethicality for occupations rated as appropriate for Marketing contexts than will the other ethnic-female leader combinations for this context.	4	No
Hypothesis 9: Perceptions of ethicality of the leader will not differ for White male leaders but will differ as a function of the occupation for Black and female leaders -White female leaders will be highly rated in Marketing context, while -Black leaders will be highly rated in occupations which are regarded as appropriate (coach).	4	No

Figures

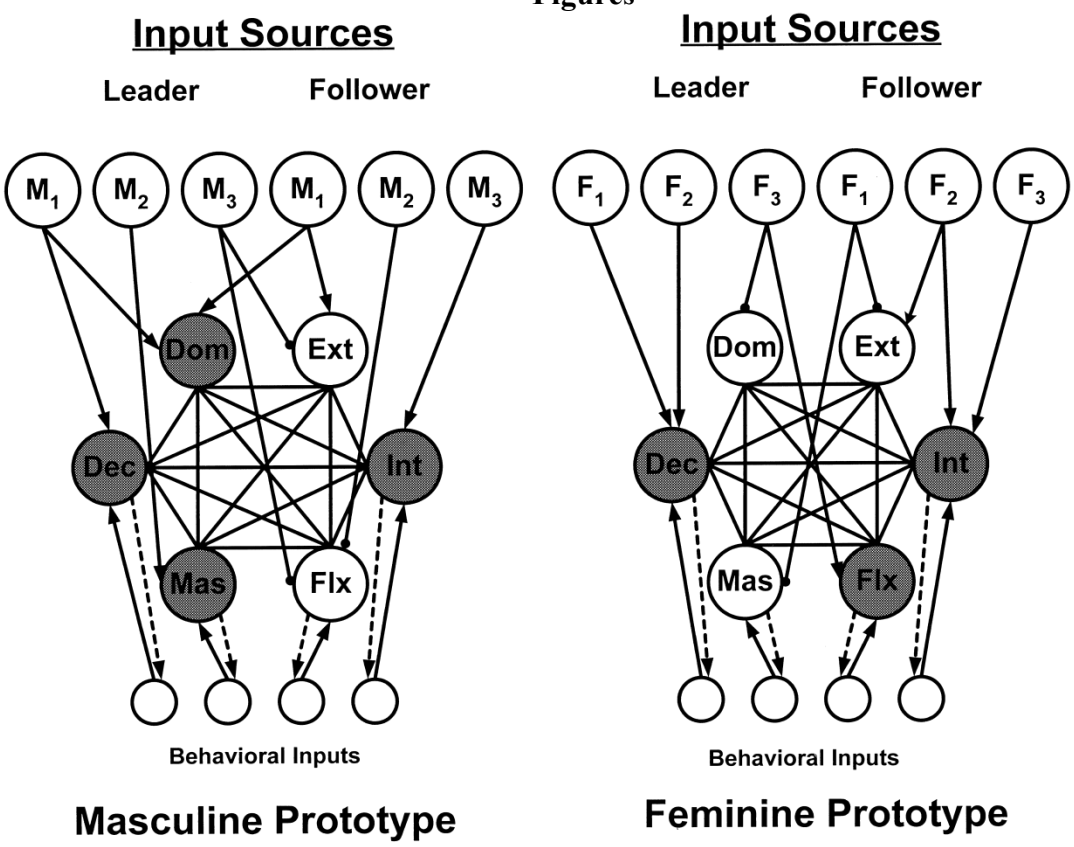


Figure 1. An example of the connectionist theory of how leader and follower gender can activate different leadership prototypes.

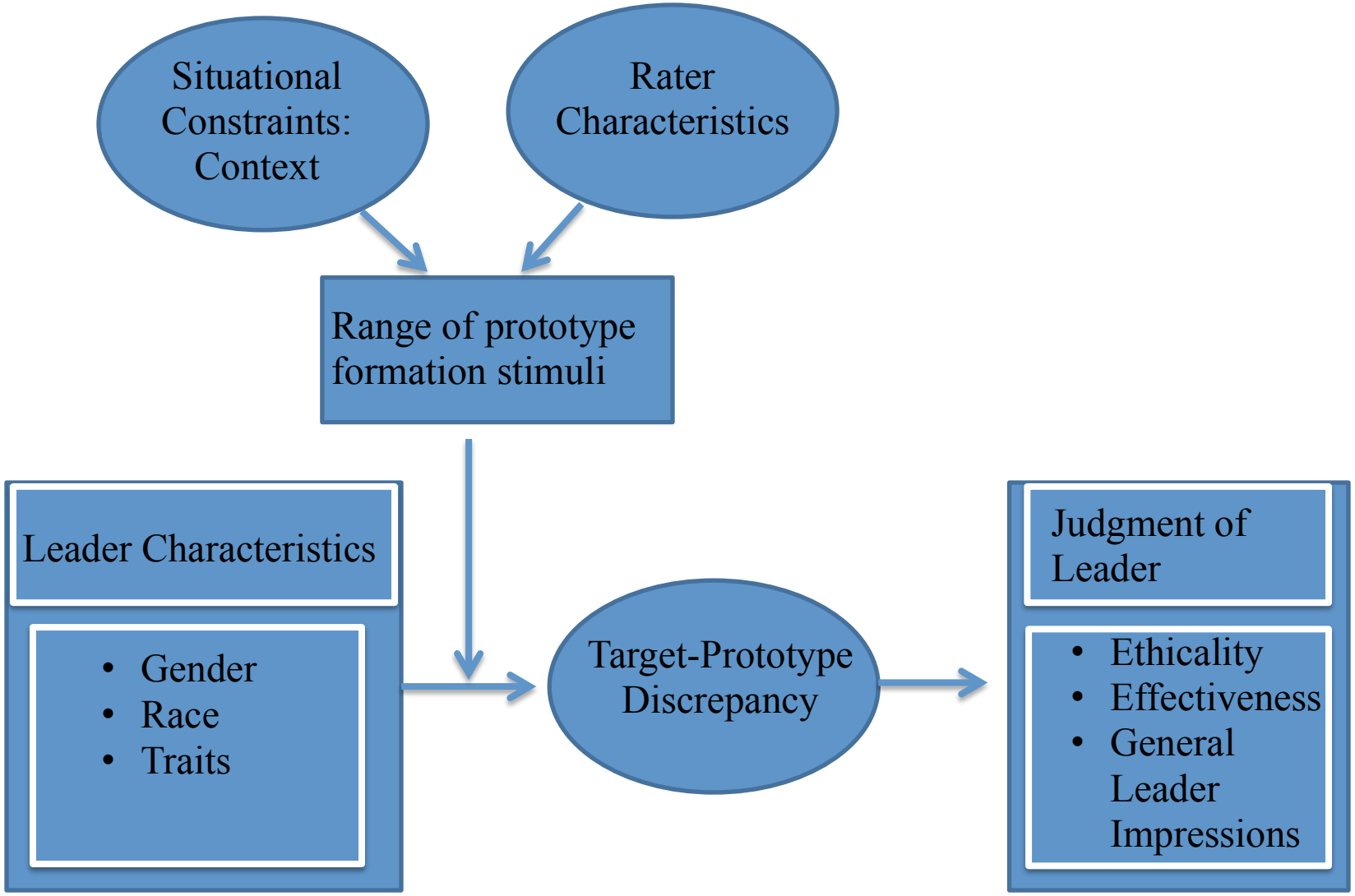


Figure 2. Theoretical Model of the Ethnic Ethical Leader

Figure 3. Two-way interaction of Gender of the Leader by the Gender of the Participant on Leader CABs for Study 2.

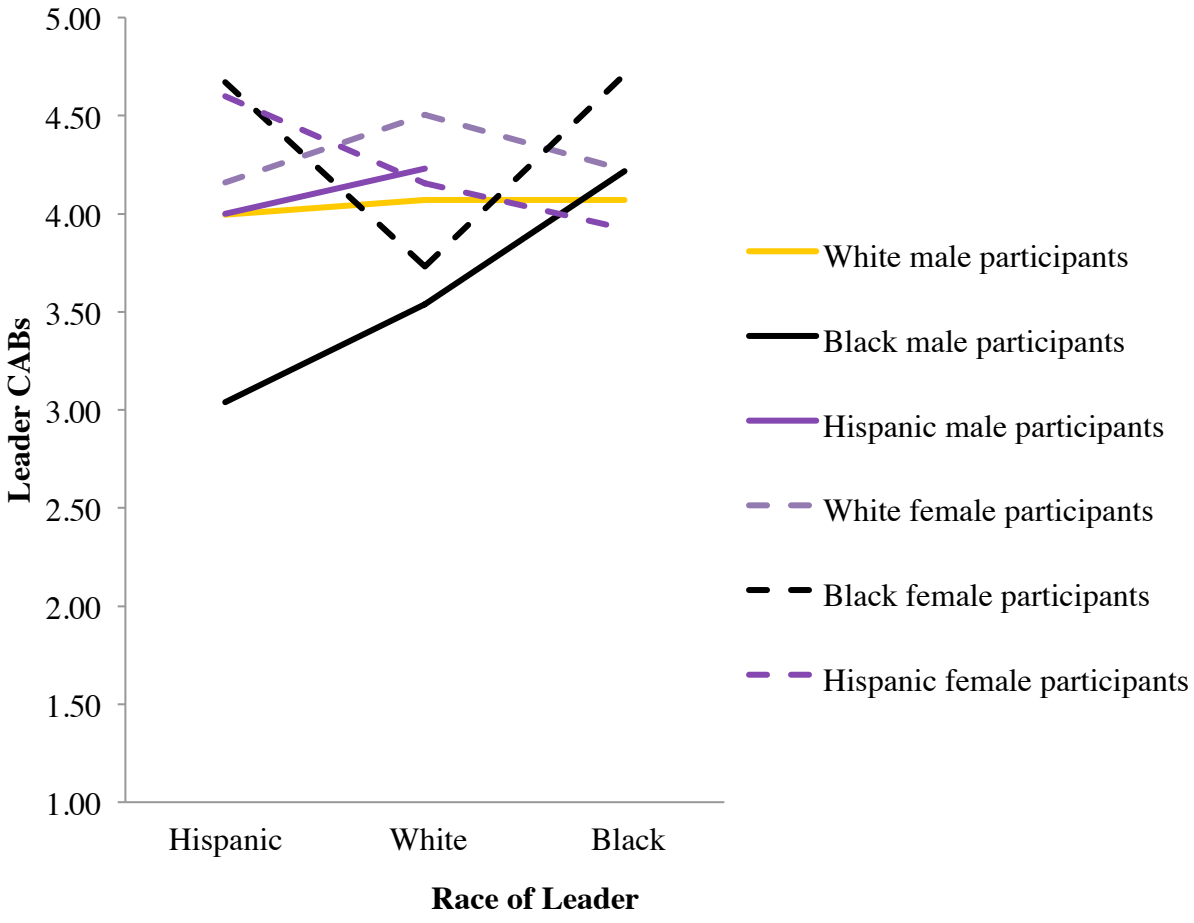


Figure 4. Three-way interaction of Race of the Leader by the Gender and Race of the Participant on Leader CABs for Study 2.

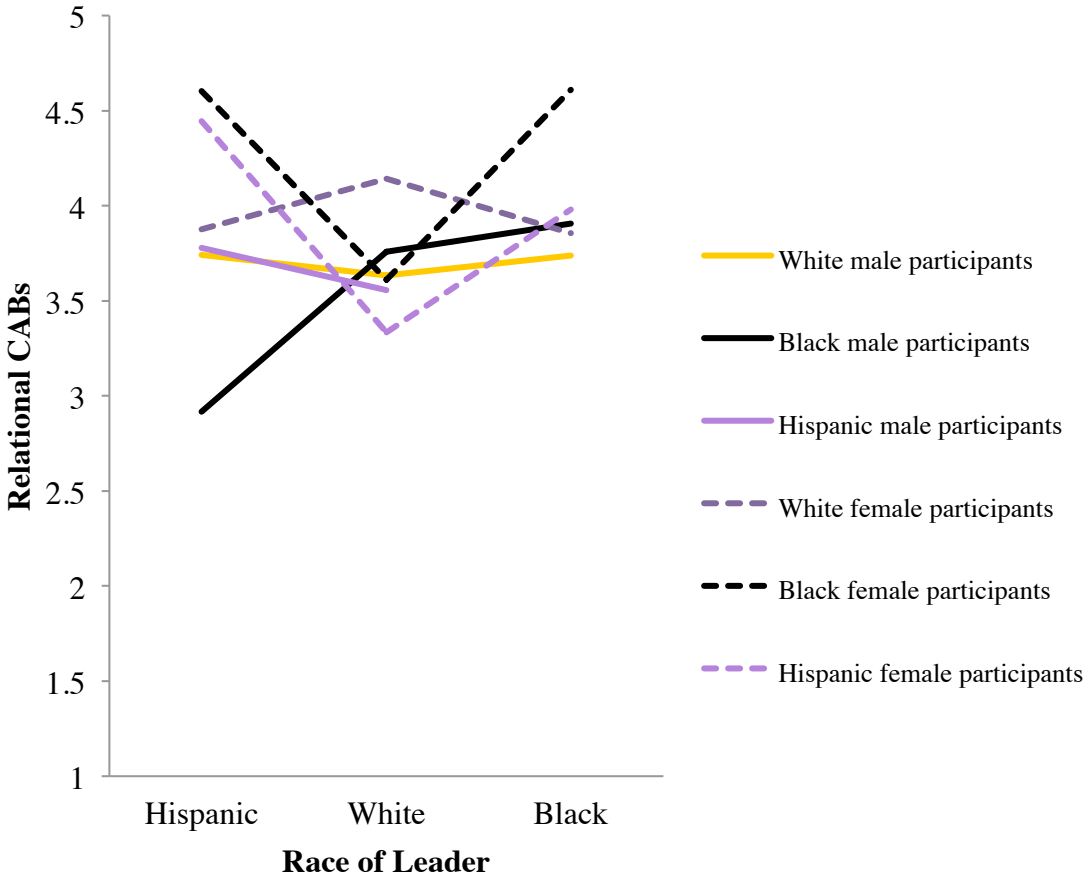


Figure 5. Three-way interaction of Race of the Leader by the Gender and Race of the Participant on Relational CABs for Study 2.

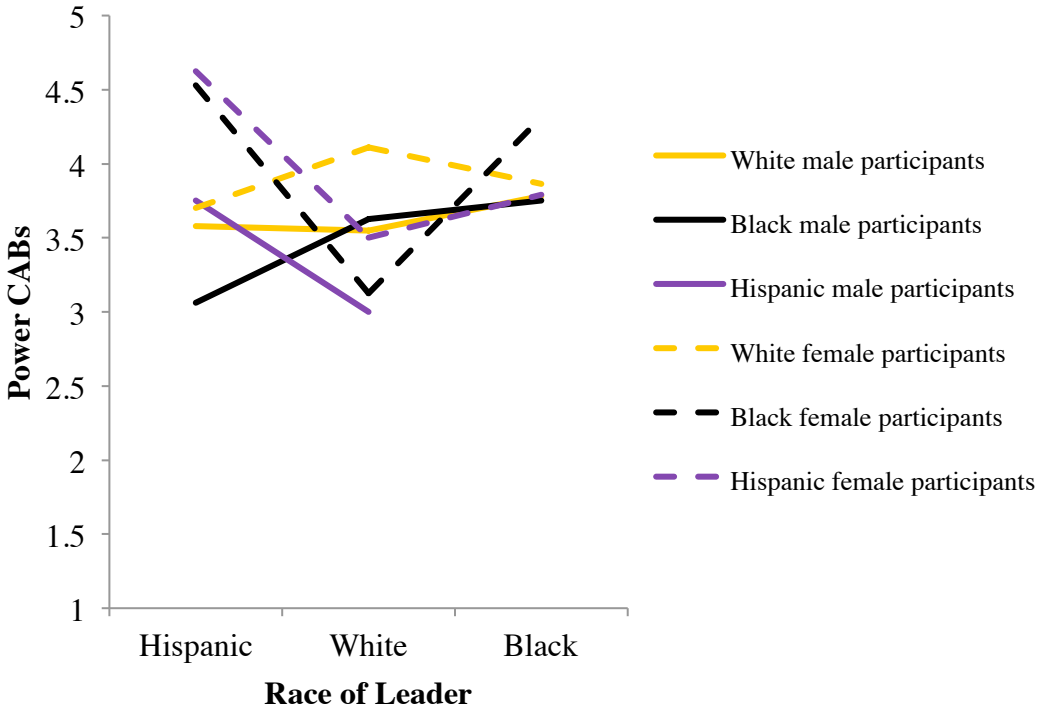


Figure 6. Three-way interaction of Race of the Leader by the Gender and Race of the Participant on Power CABs for Study 2.

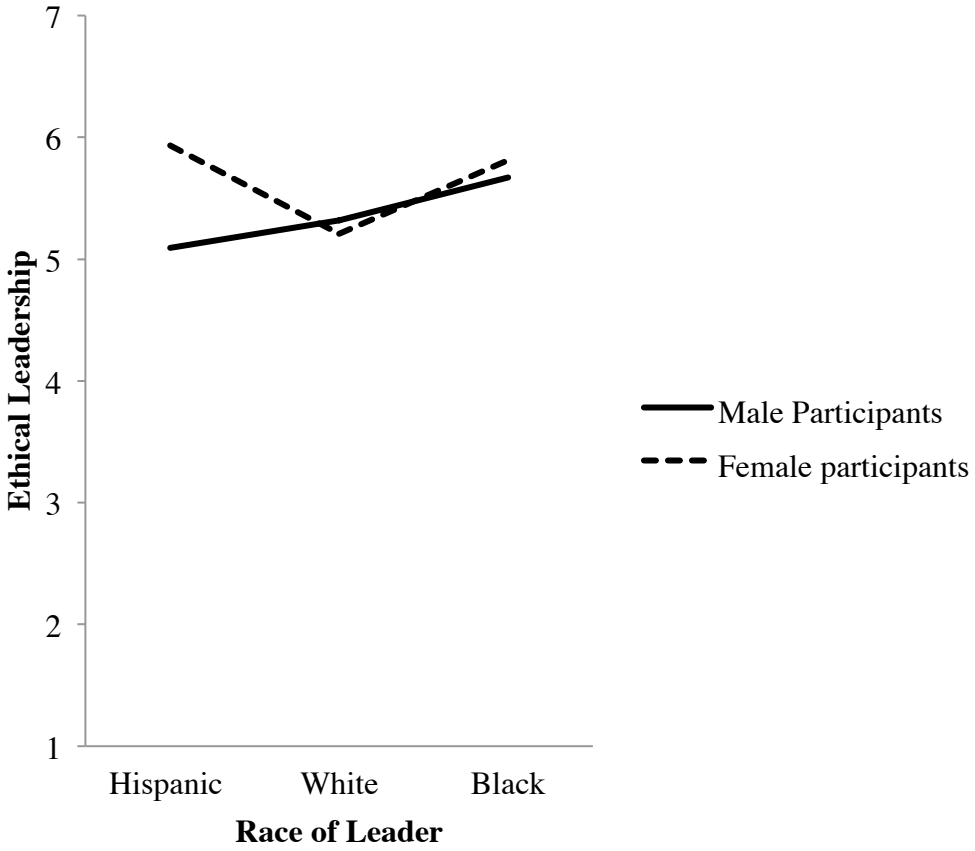


Figure 7. Two-way interaction of Race of the Leader and Gender of the Participant on Ethical Leadership for Study 2, trend $p = .09$.

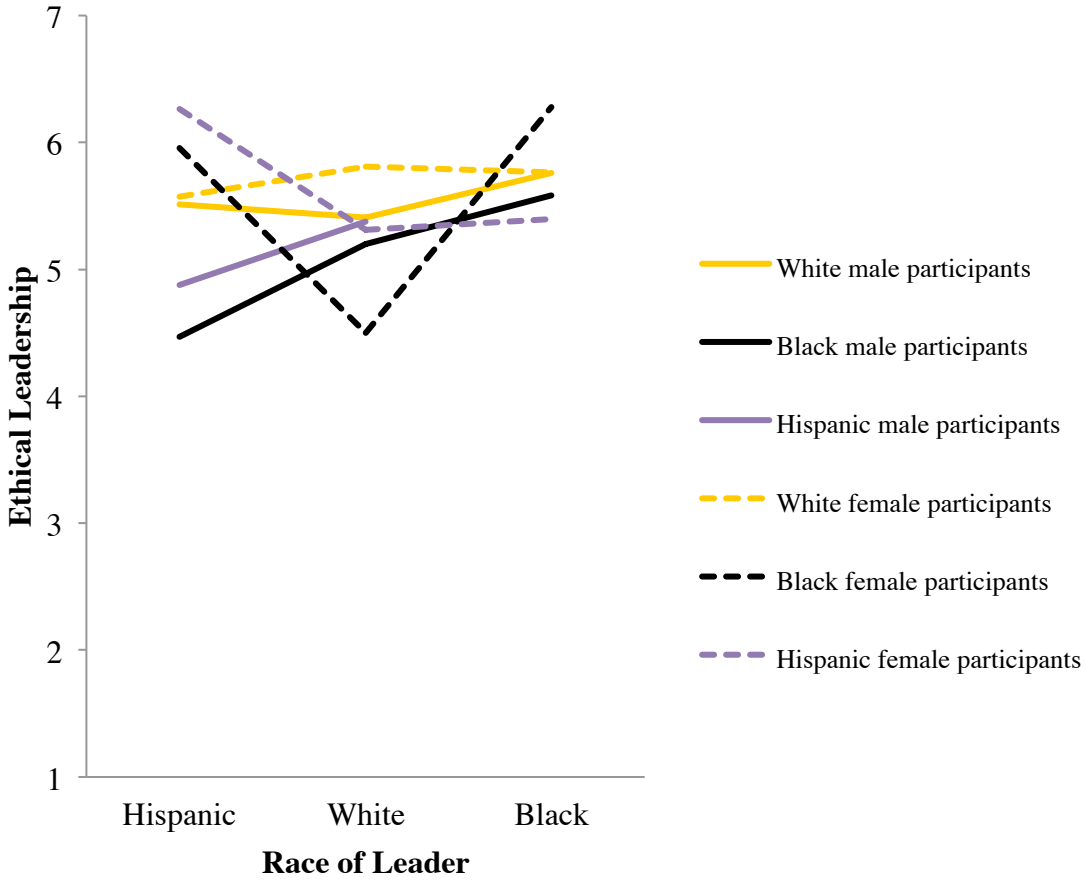


Figure 8. Three-way interaction of Race of the Leader and Gender and Race of the Participant on Ethical Leadership for Study 2.

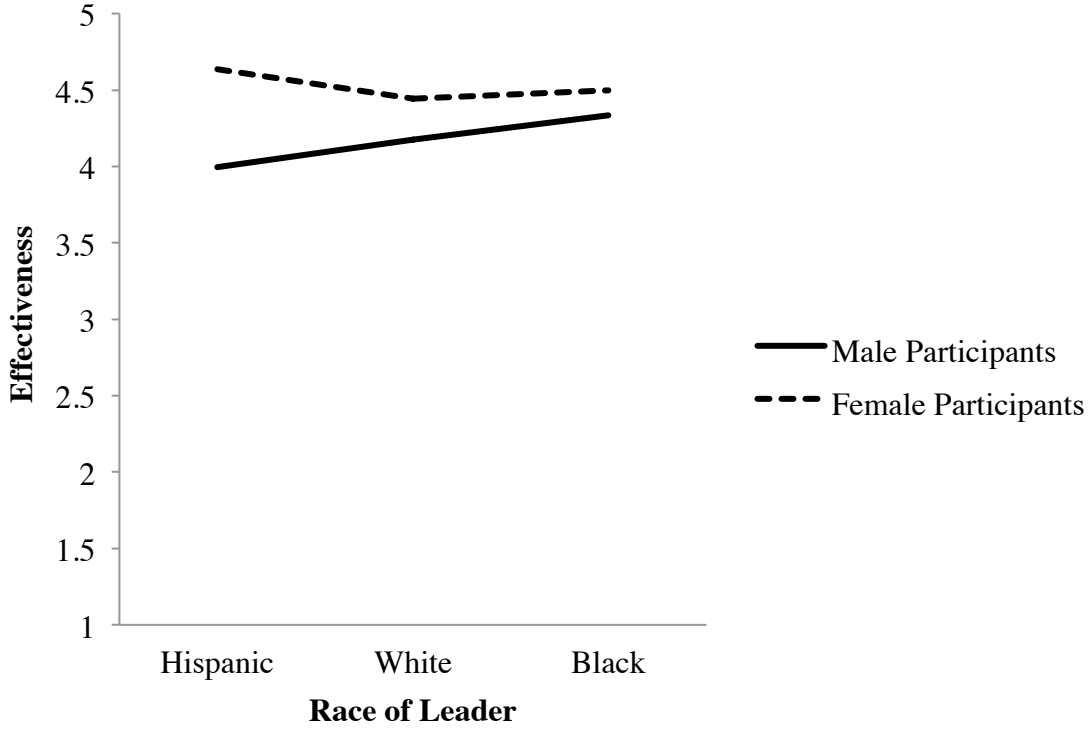


Figure 9. Two-way interaction of Race of the Leader and the Gender of the Participant on Effectiveness for Study 2.

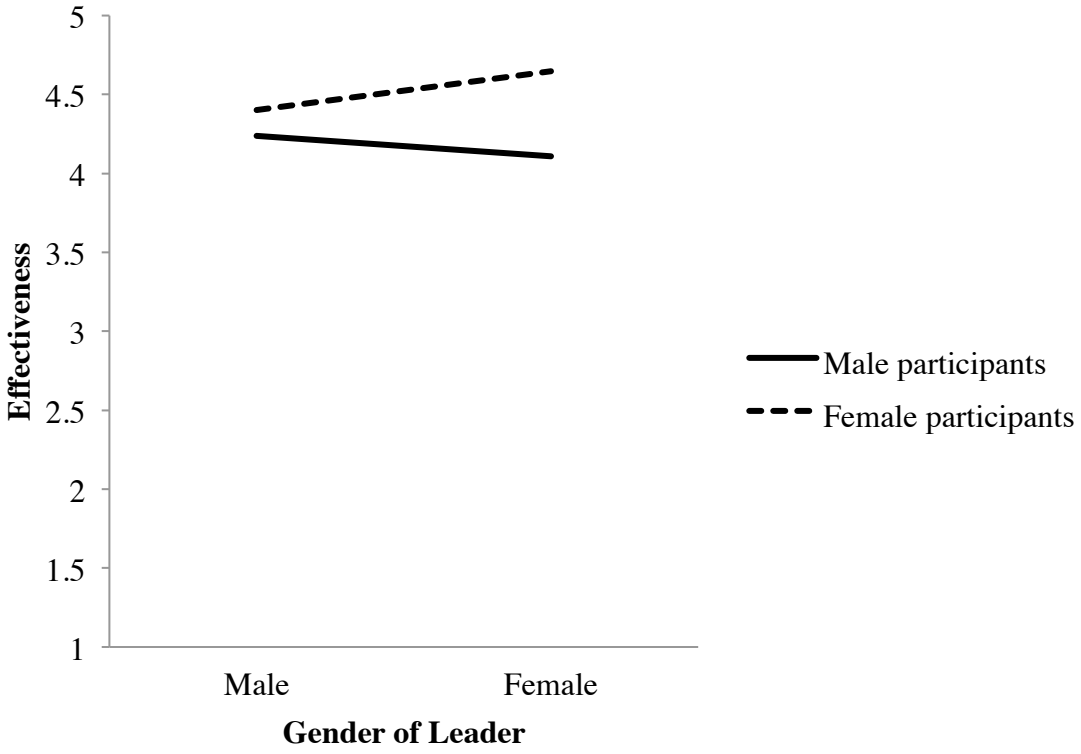


Figure 10. Two-way interaction of Race of the Leader by the Gender of the Participant on Effectiveness for Study 2.

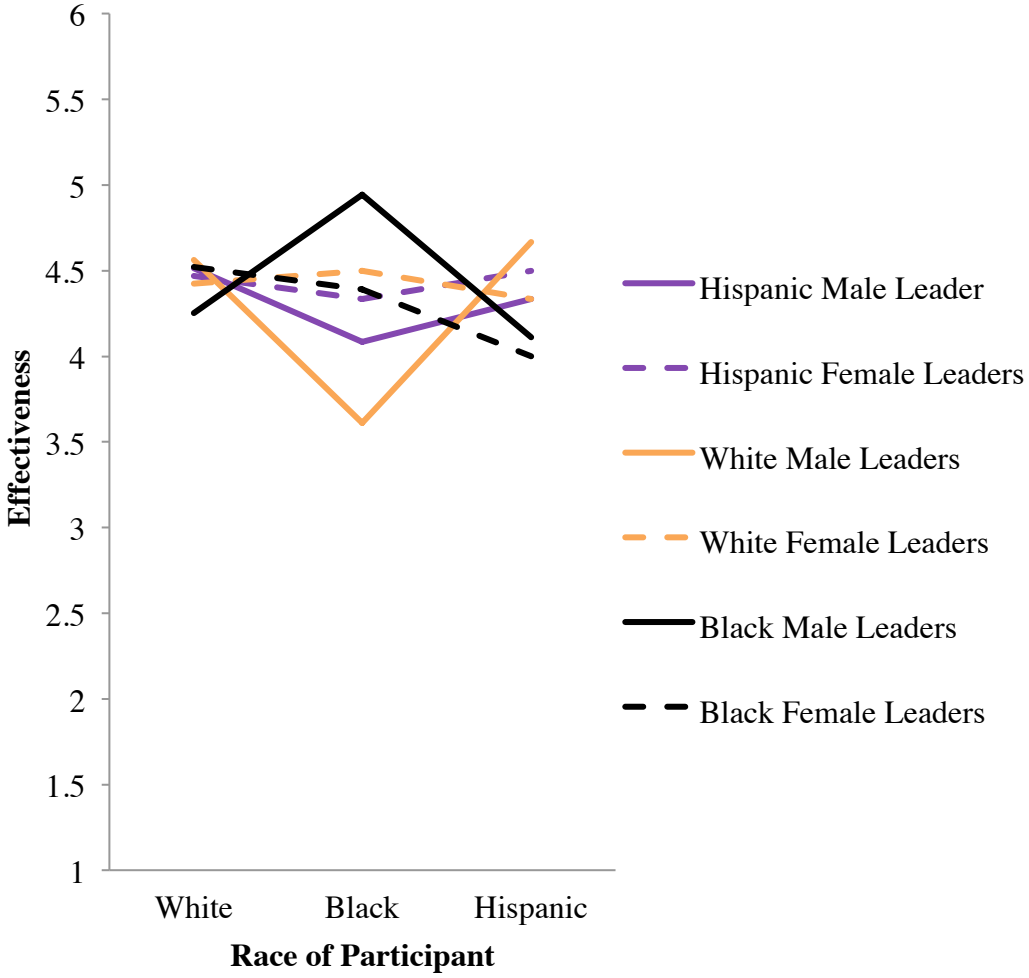


Figure 11. Three-way interaction of Race and Gender of the Leader by the Race of the Participant on Effectiveness for Study 2.

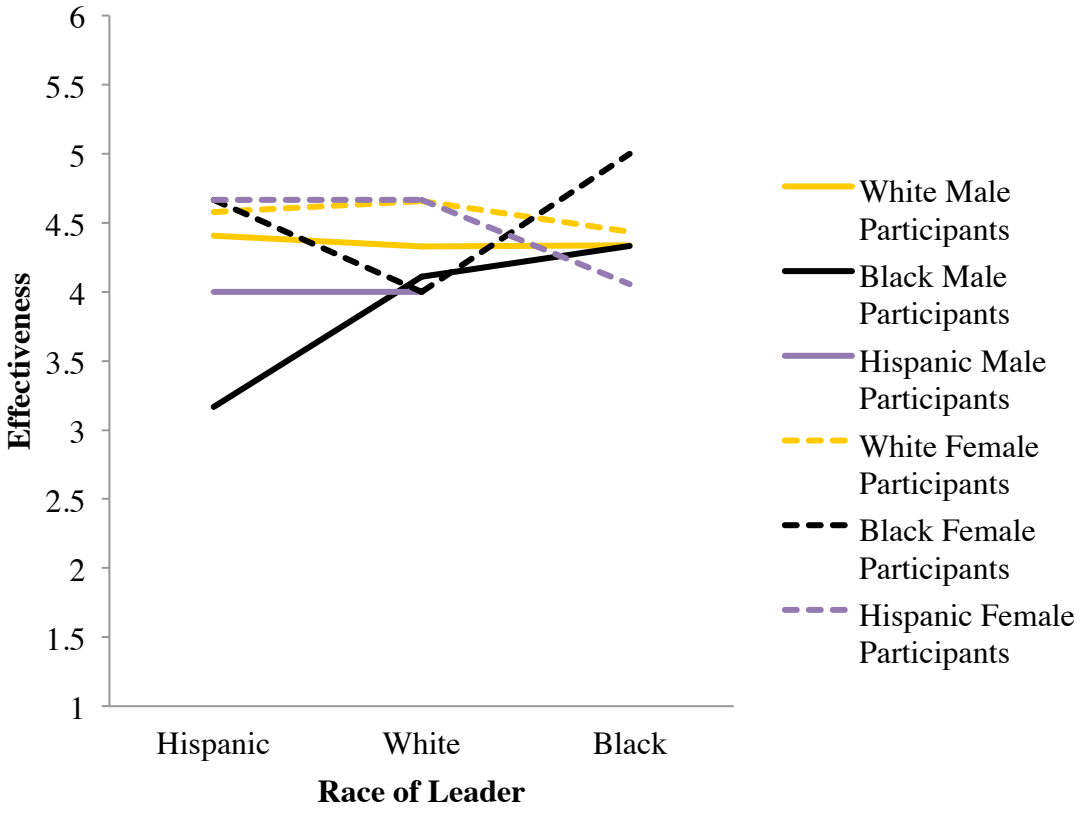


Figure 12. Three-way interaction of Race of the Leader by the Gender and Race of the Participant on Effectiveness for Study 2.

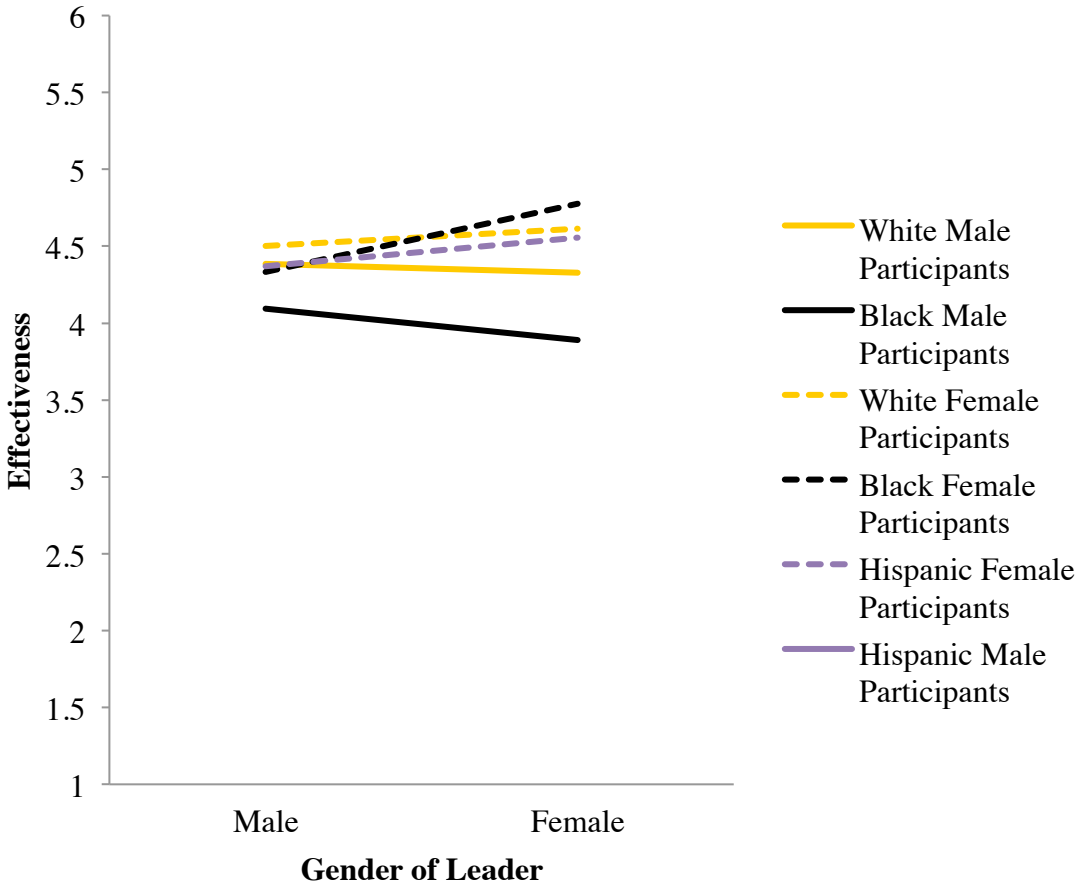


Figure 13. Three-way interaction of Gender of the Leader by the Gender and Race of the Participant on Effectiveness for Study 2.

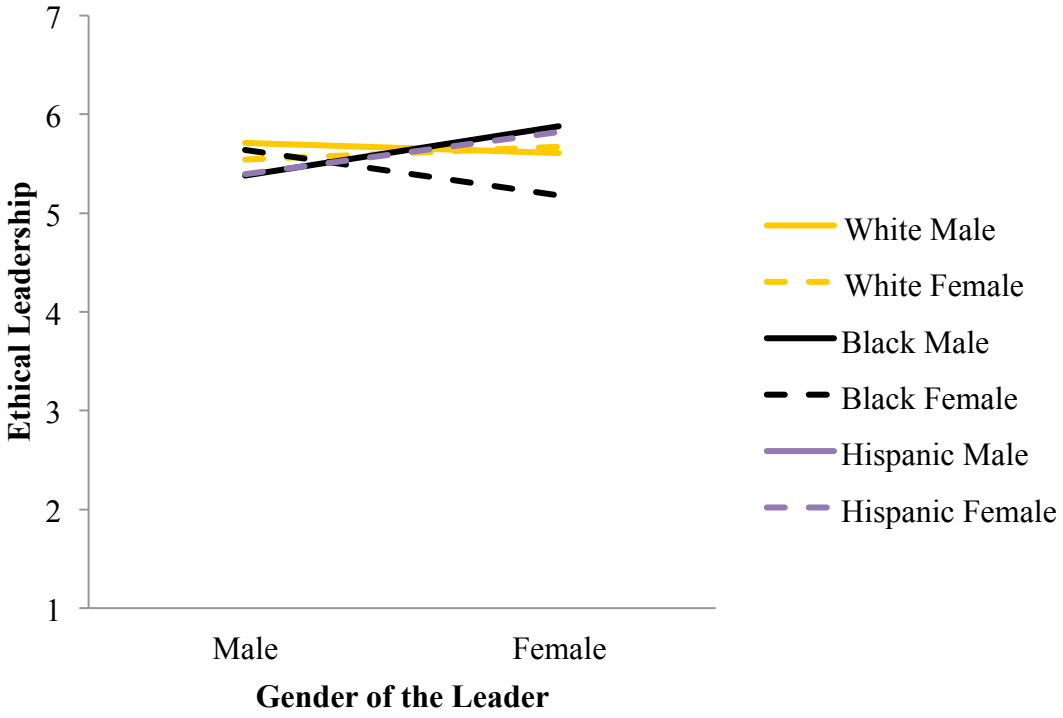


Figure 14. Three-way interaction of Gender of the leader and the Race and Gender of the participant on Ethical Leadership, controlling for Leader CABs.

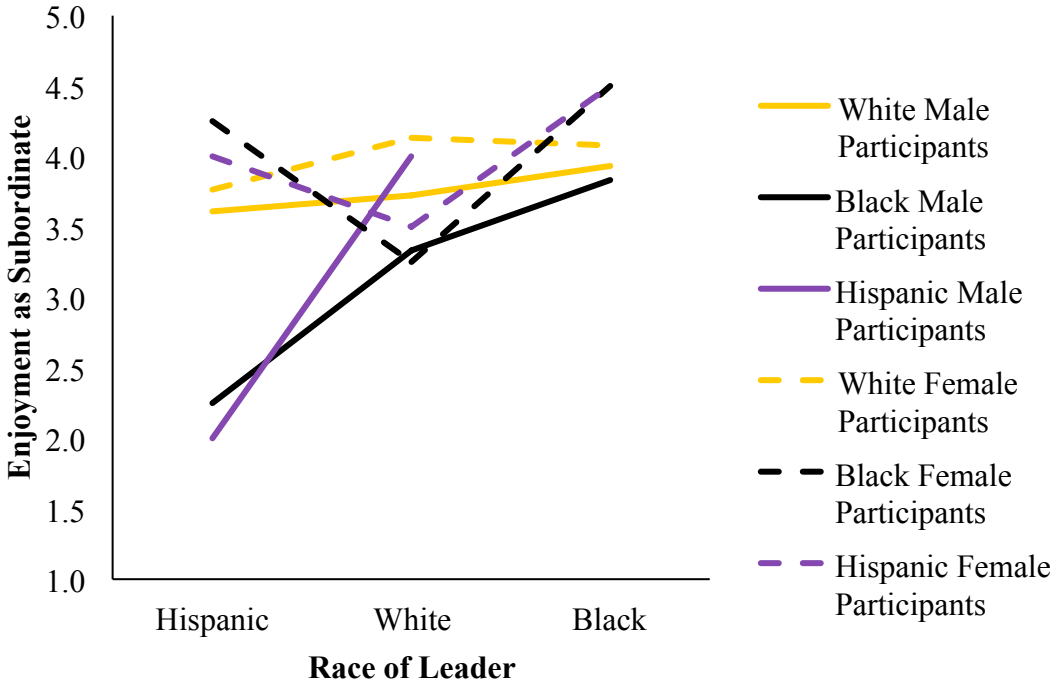


Figure 15. Three-way interaction of Race of the Leader by the Race and Gender of the Participant on Enjoyment as a Subordinate for Study 2.

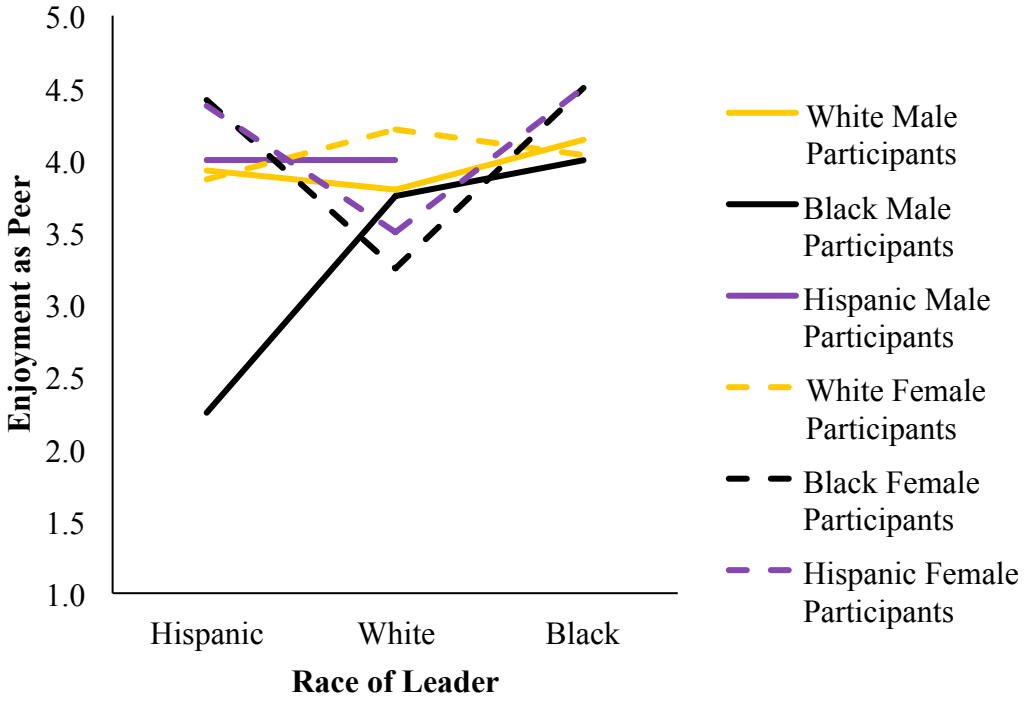


Figure 16. Three-way interaction of Race of the Leader by the Race and Gender of the Participant on Enjoyment as a Peer for Study 2.

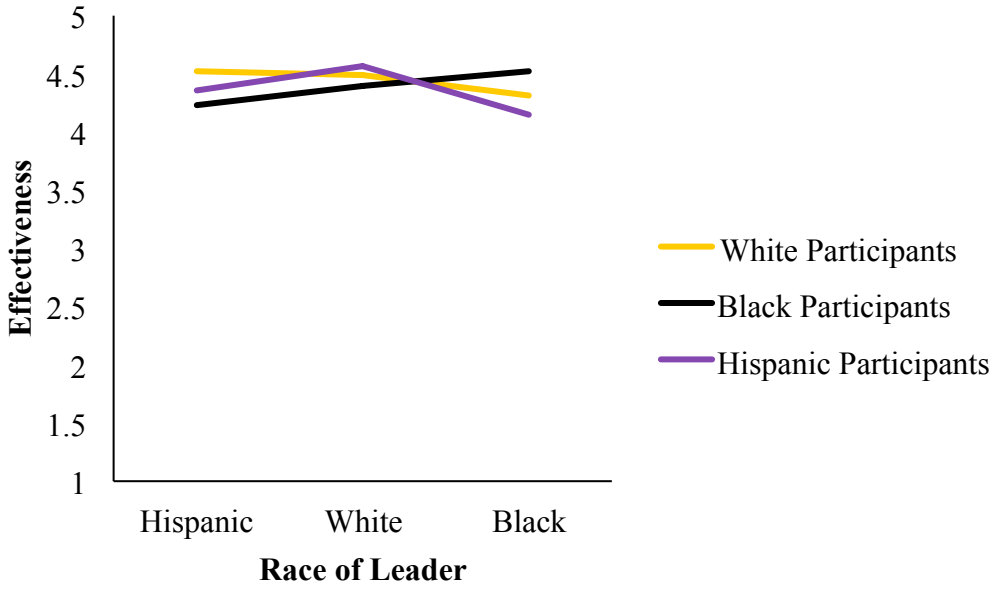


Figure 17. Two-way interaction of Race of the Leader by the Race of the Participant on leader Effectiveness controlling for Ethicality, for Study 2.

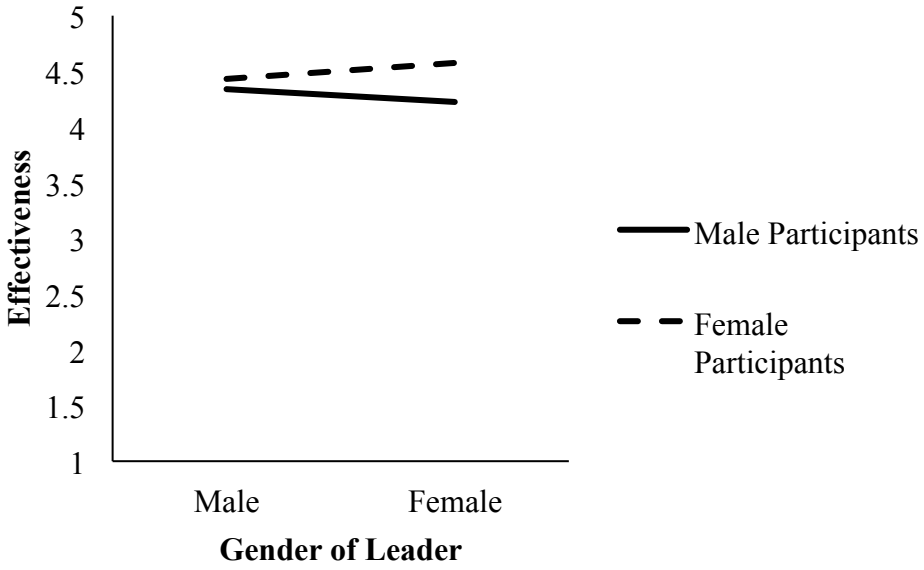


Figure 18. Two-way interaction of Gender of the Leader by the Gender of the Participant on leader Effectiveness controlling for Ethicality, for Study 2.

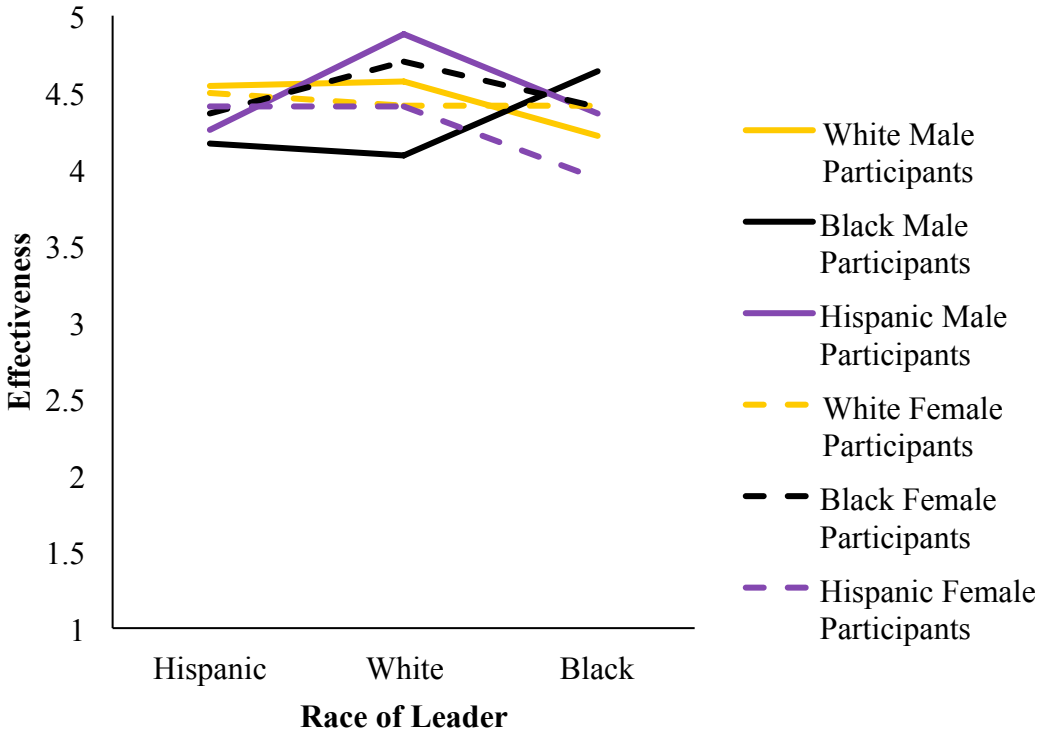


Figure 19. Three-way interaction of Race of the Leader by the Gender and Race of the Participant on Leader Effectiveness for Study 2 controlling for Ethicality.

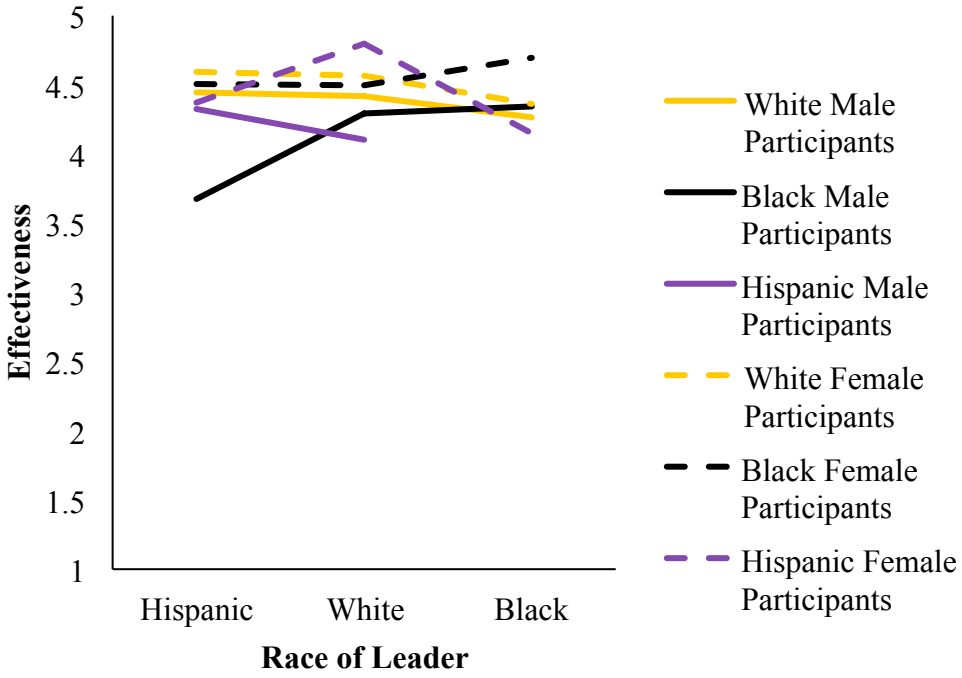


Figure 20. Three-way interaction of Race of the Leader by the Gender and Race of the Participant on Leader Effectiveness for Study 2 controlling for Ethicality.

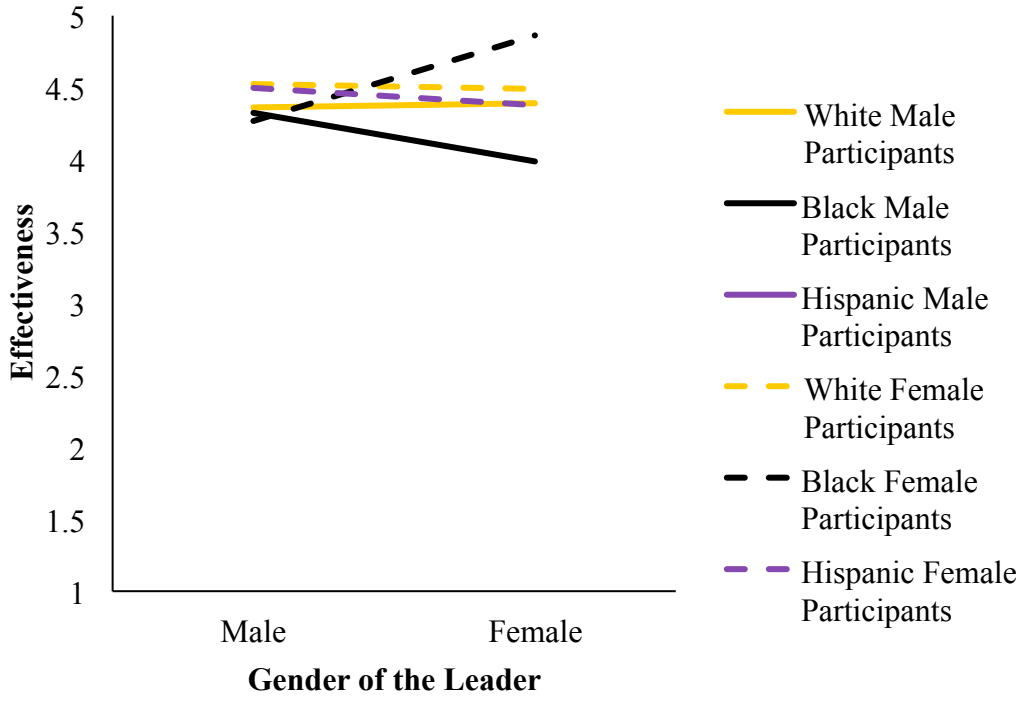
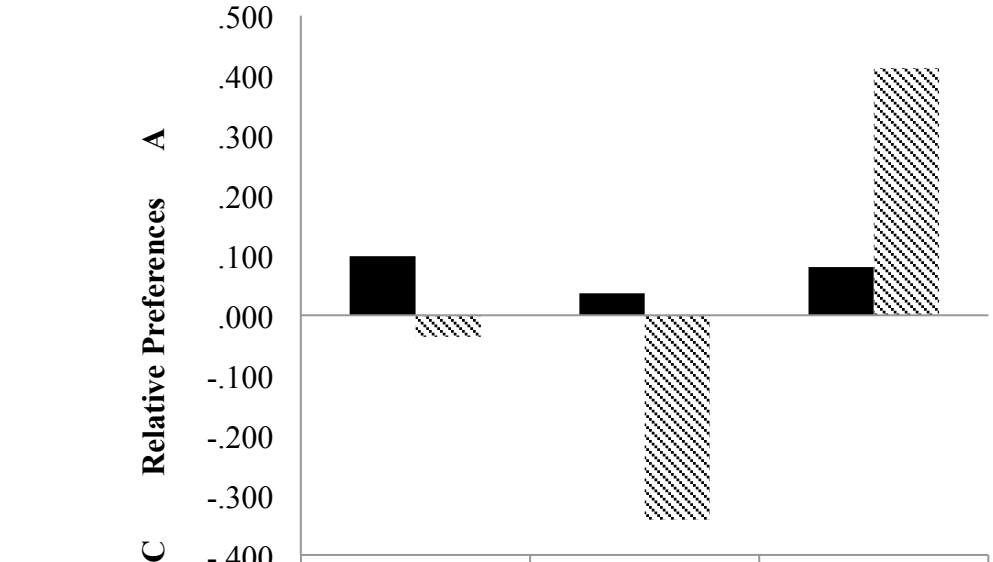
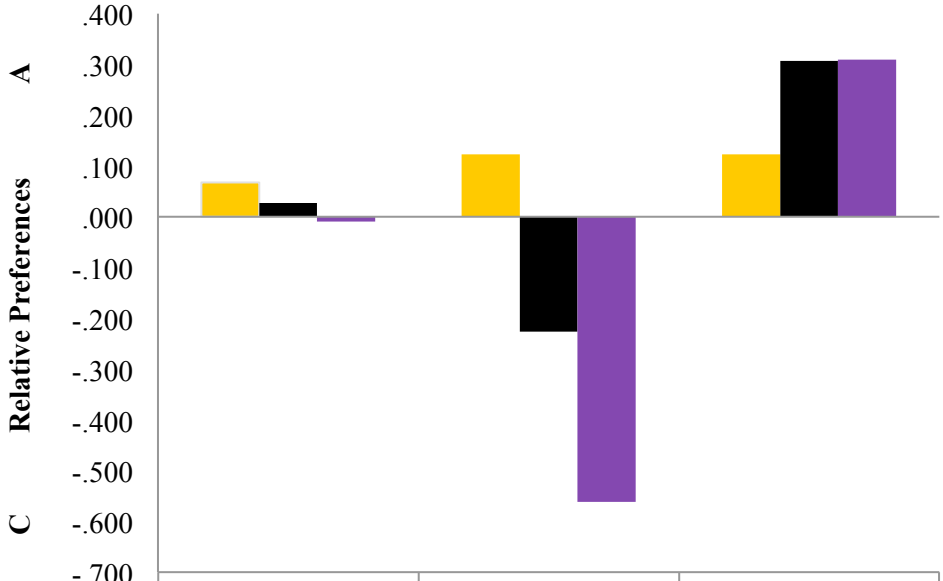


Figure 21. Three-way interaction of Gender of the Leader by the Race and Gender of the Participant on Leader Effectiveness controlling for Ethicality, for Study 2.



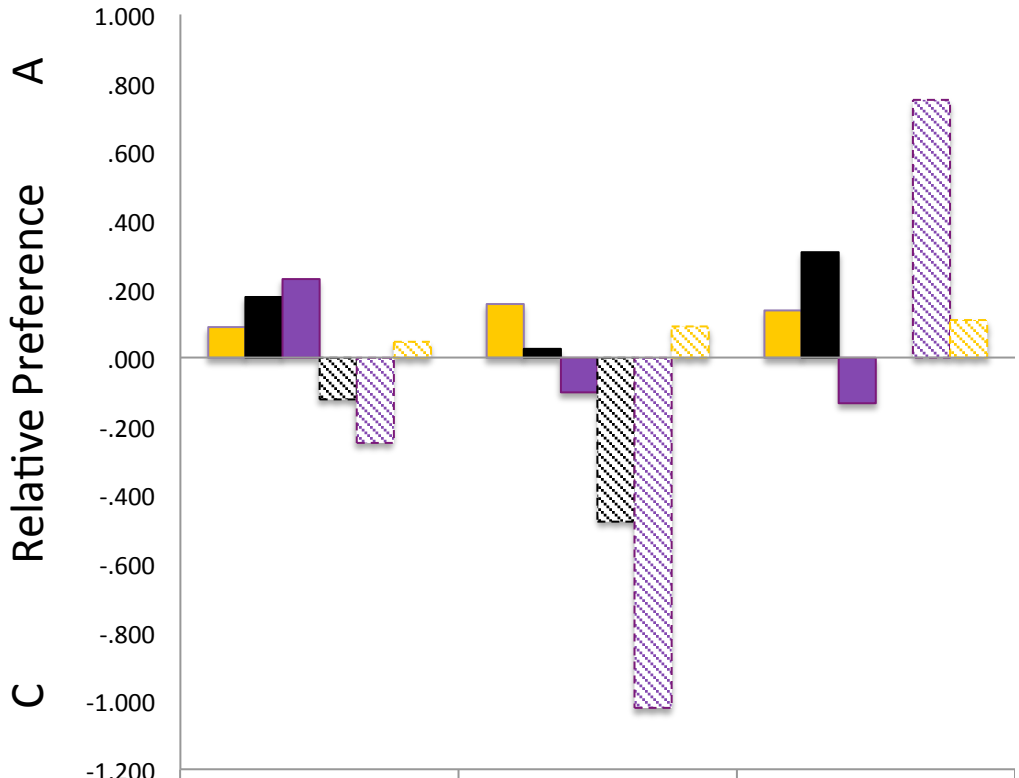
	BH IAT	WB IAT	WH IAT
Male Participants	.098	.037	.080
Female Participants	-.036	-.341	0.413

Figure 22. Two-way interaction of Gender of the Participant and IAT condition on AC D-score for Study 3.



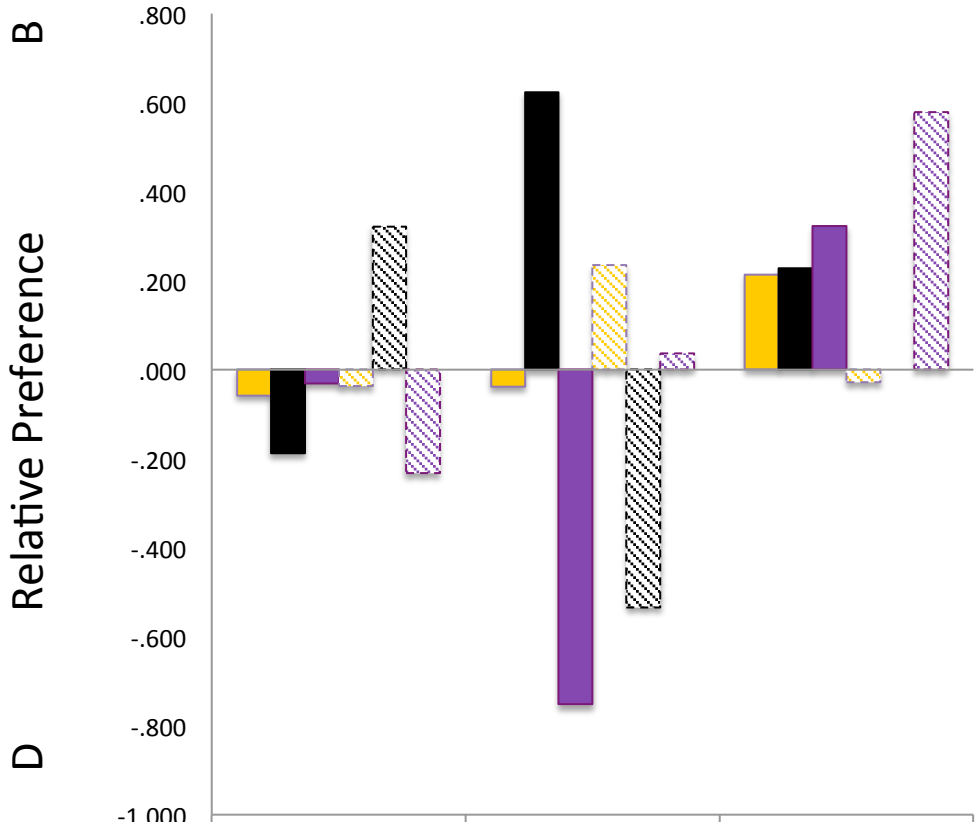
	BH IAT	WB IAT	WH IAT
White Participants	.068	.123	.123
Black Participants	.028	-.226	0.31
Hispanic Participants	-.010	-.561	.309

Figure 23. Two-way interaction of Race of the Participant and IAT condition on AC D-score for Study 3, trend $p = .07$.



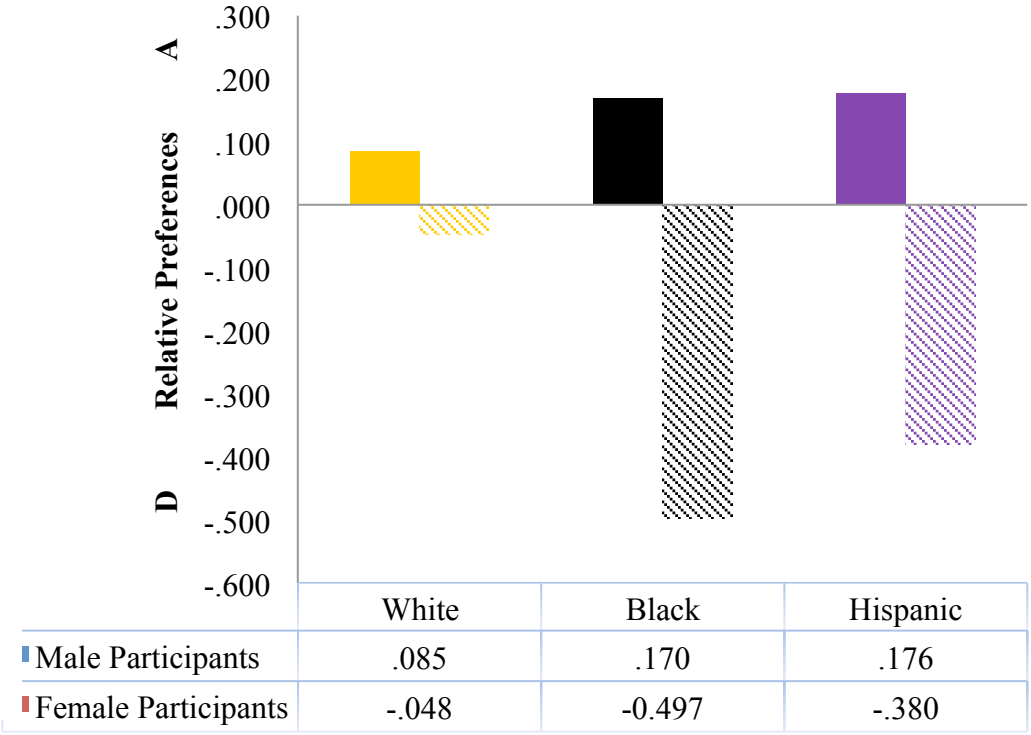
	BH IAT	WB IAT	WH IAT
White male participants	.088	.156	.137
Black male participants	.177	.025	.307
Hispanic male participants	.228	-.102	-.133
Black female participants	-.122	-.477	
Hispanic female participants	-.248	-1.021	.751
White female participants	.047	.090	.110

Figure 24. Three-way interaction of Gender and Race of the Participant on AC D-score for Study 3.



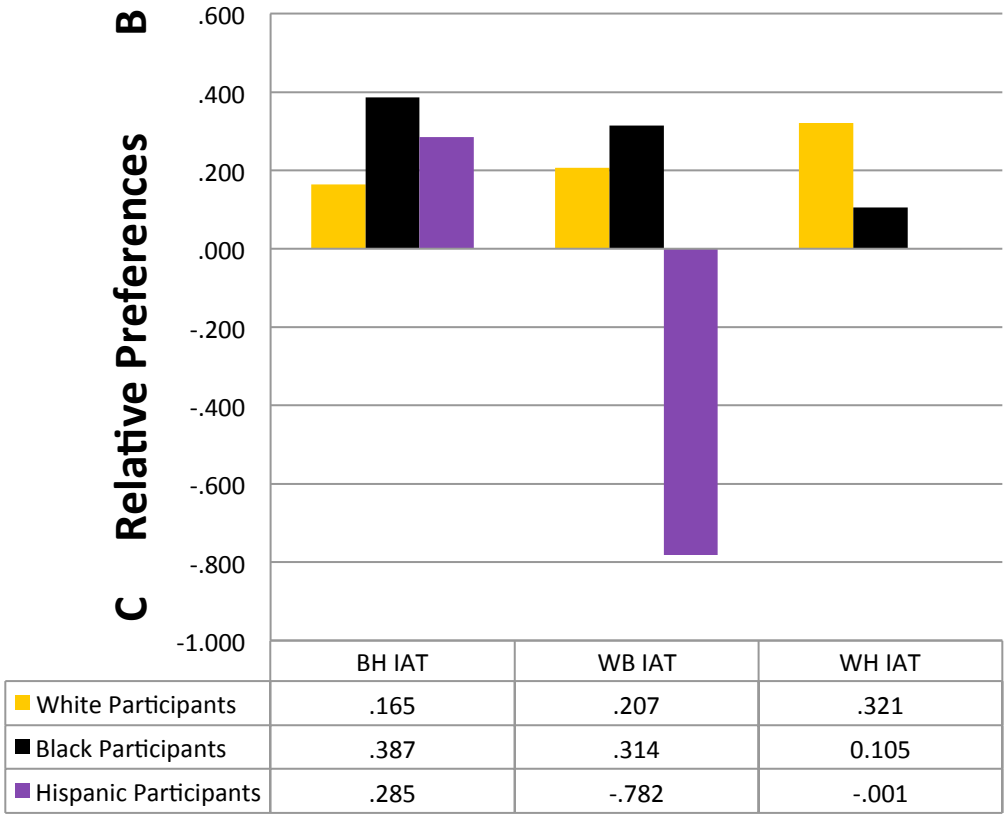
	BH IAT	WB IAT	WH IAT
White male participants	-.058	-.039	.214
Black male participants	-.187	.624	.229
Hispanic male participants	-.031	-.752	.323
White female participants	-.037	.235	-.028
Black female participants	.321	-.534	
Hispanic female participants	-.233	.037	.579

Figure 25. Three-way interaction of between IAT condition and the Gender and Race of the Participant on BD D-score for Study 3.



	White	Black	Hispanic
Male Participants	.085	.170	.176
Female Participants	-.048	-0.497	-.380

Figure 26. Two-way interaction of Race and Gender of the Participant on AC D-score for Study 3.



	BH IAT	WB IAT	WH IAT
White Participants	.165	.207	.321
Black Participants	.387	.314	0.105
Hispanic Participants	.285	-.782	-.001

Figure 27. Two-way interaction of Race of the Participant and IAT condition on BC D-score for Study 3.

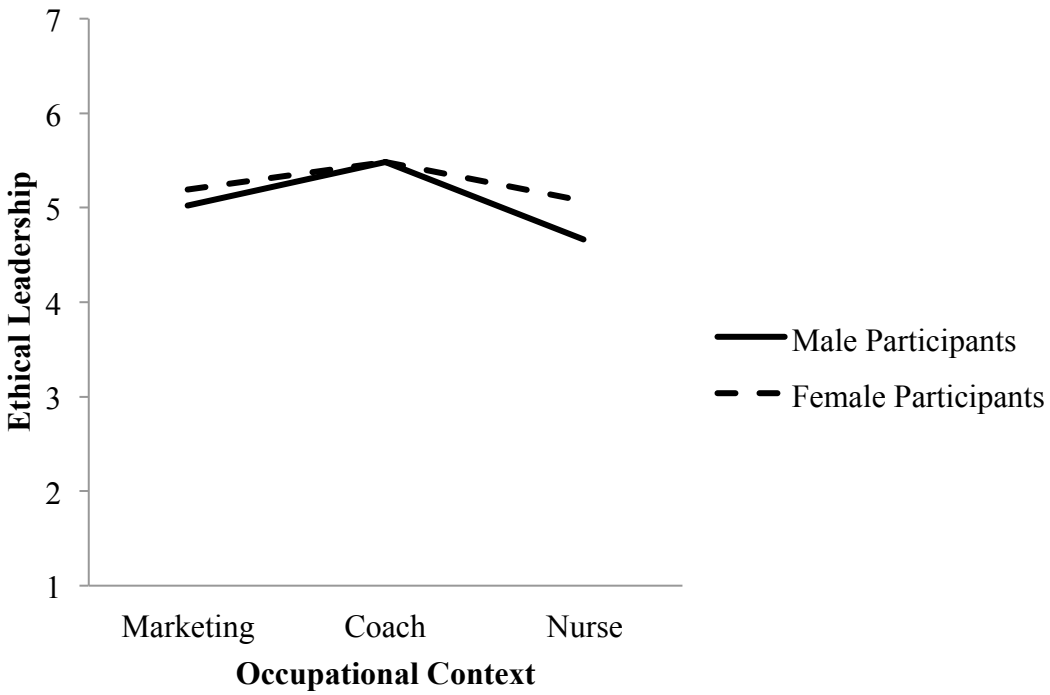


Figure 28. Two-way interaction of Race of the Leader and the Gender of the Participant on Ethical Leadership for Study 4, $p = 0.07$.

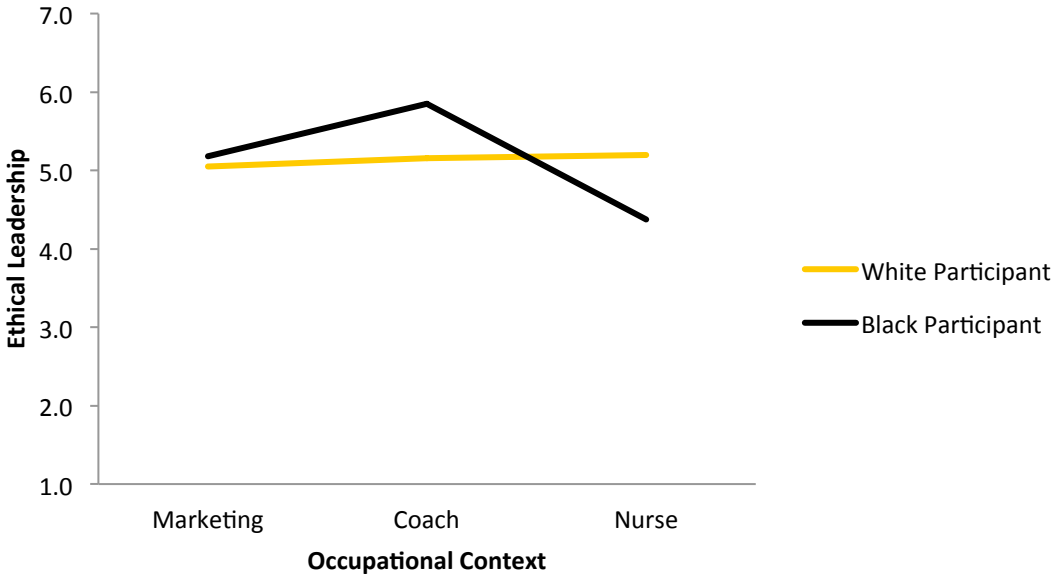


Figure 29. Two-way interaction of Context and Race of the Participant on Leader Ethicality for Study 4, $p = 0.07$.

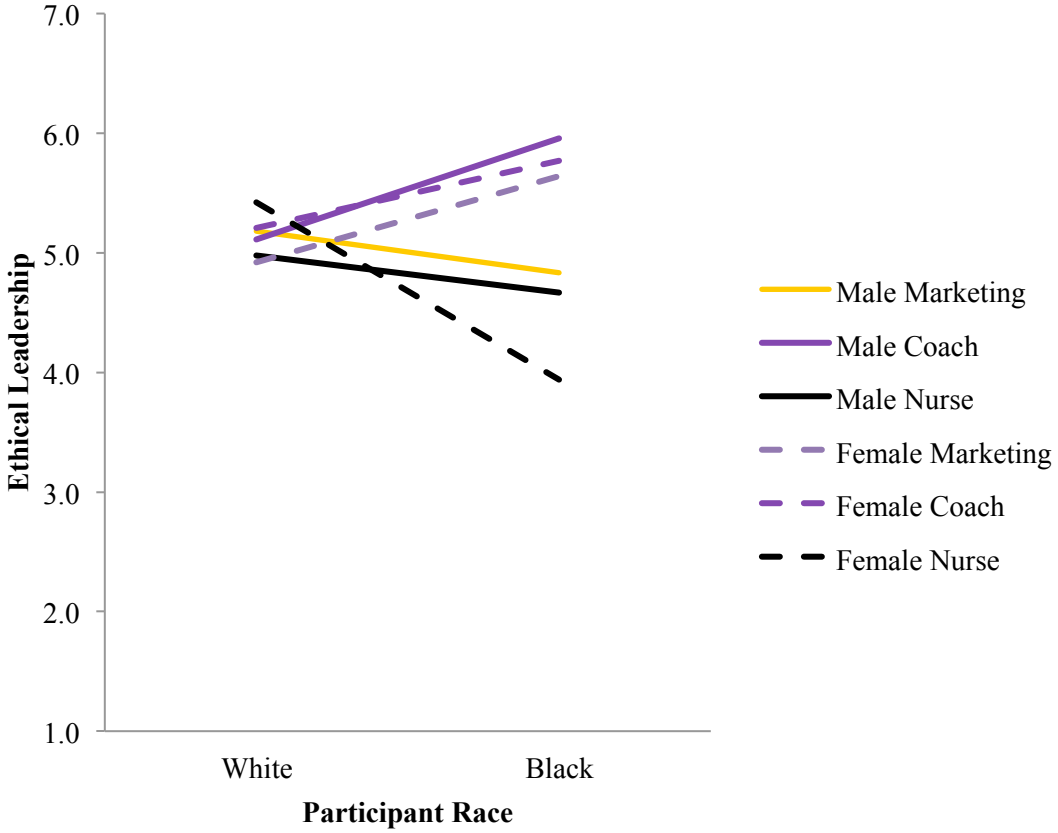


Figure 30. Three-way interaction of Gender and Occupation of the Leader and Race of the Participant on Ethical Leadership for Study 4, $p = 09$.

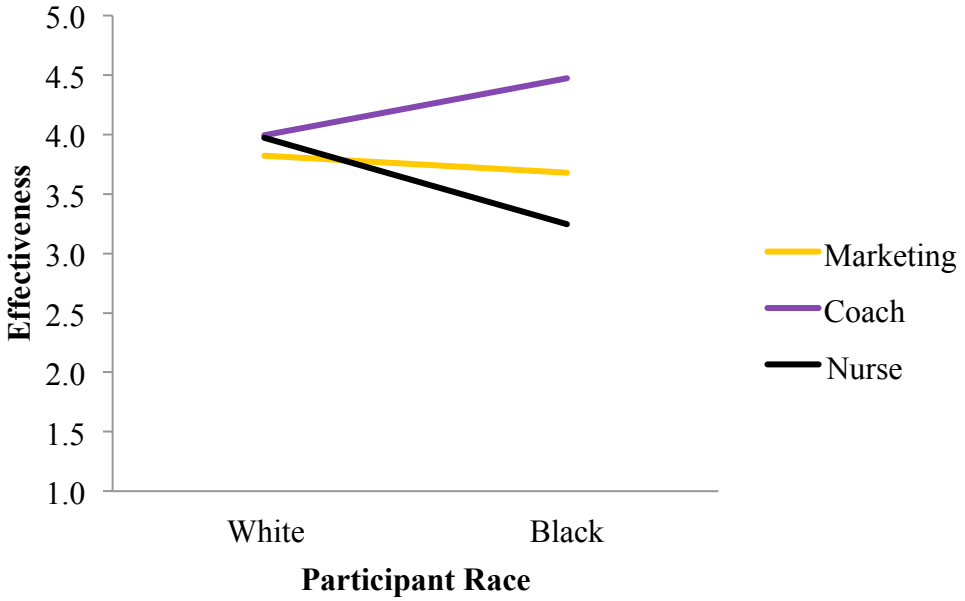


Figure 31. Two-way interaction of the Race of the Participant and Occupational Context on Effectiveness for Study 4.

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